

## Physician and Medical Representative Interaction in Iraqi Private Sector: A Qualitative Study

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### Abstract

Pharmaceutical companies assign a budget for activities and promotions that aim to change the prescription habits of the physicians to choose the most suitable medications for their patients, which will eventually grow their sales. The study's objectives were to explore physicians' and medical representatives' perspectives on the criteria of impactful professional PP and the factors influencing the interaction between physicians and medical representatives. Qualitative in-depth interviews with flexible probing techniques were carried out in 2023. A semi-structured, open-ended interview questionnaire was used to interview physicians and medical representatives (MRs) from different private clinics in several governorates in Iraq. Ten physicians and ten MRs participated in this study. For physicians, pharmaceutical promotion was a beneficial profession. The number of patients in the clinic and the obtained benefits of the medication were the most important factors interfering with physician acceptance of MR visits, and they usually refused the visit if the MR was from a new or unknown company. The majority requested to be updated about the advantages of the drug, the price, and recent studies about the medications. Regarding MR overviews, most MRs believed that PP enhanced the link between the physician and the patients. The scientific knowledge of the representative was the most important factor affecting the relationship between the physician and MR. For that, most MRs need the company to improve their scientific data about advertised medications and their communication skills. The nature of a company (brand or generic) was the most important factor that affected the decision to accept the visit by a physician. If the physician is busy or the company is new, this sometimes leads to the physician's rejection. Both the physicians and MRs acknowledged that MR could enhance physicians' knowledge of medications. However, some believe this role is limited to scientific MR rather than encompassing all MR. Finally, we can conclude that various factors and considerations may influence the nature of the physician-MR relationship. Some of these were associated with the company itself, which ought to have equipped MRs with proficient scientific expertise and effective communication skills. The increasing number of generic medications, the presence of numerous medical companies, and the inadequate training of MRs all contribute to the complexities of MR's job and potentially have a negative impact on the future of medical advertising.

**Keywords:** Physician, Medical representative, pharmaceutical promotion, Pharmacist, Challenges.

### Introduction

The Pharmaceutical Industry significantly impacts the global economy and the health and well-being of the general population. Worldwide, the pharmaceutical sector is one of the fastest-growing industries, with a market value of around \$1.42 trillion at the end of 2021<sup>(1)</sup>.

The pharmaceutical industry is distinctive since the chooser is not the user. So, the marketing methods employed in the pharmaceutical industry differ from those employed in other industries<sup>(2)</sup>.

Physicians select most pharmaceuticals used by patients. As a result, most pharmaceutical companies' marketing budgets are spent on modifying and influencing physician prescribing behavior to increase sales<sup>(3)</sup>.

The pharmaceutical business extensively invests in promotion and employs several promotional methods to influence physicians' prescribing decisions. Medical representatives (MRs) are essential professionals promoting their products in this environment. A key result of the connections between physicians and medical reps is a conflict of interest that may contribute to overprescribing pharmaceuticals and, consequently, to adverse health and financial repercussions on patients.<sup>(4)</sup>

Interactions between physicians and MRs are unavoidable and desirable, yet they may lead to medical conflicts of interest<sup>(5)</sup>.

One of the most significant consequences of such relationships has been that they frequently result in a conflict of interest between a physician's duties to their patient and the pharmaceutical industry's interest in maximizing the sale of its products. This conflict of interest may contribute to the overprescribing of medications, which can potentially negatively affect the health of patients and the economy<sup>(4)</sup>.

The literature marketing the drugs and distributed by the drug manufacturer's representative is an important source of information for the busy physician. Pharmaceutical medicine corporations use physician-targeted promotion through medical reps as one of their most overall promotional strategies<sup>(6)</sup>. Accordingly, the information provided to the doctor should be accurate, objective, and exhaustive to enable him to pick and administer the drug appropriately to a particular patient<sup>(7)</sup>.

According to a previous study that surveyed Iraqi pharmacists about the role of MRs, the contact between MRs and physicians in Iraq is typically influenced by the inducement effect, which can be either scientific inducement based on clinical evidence or a gift. Inducement results in irrational prescribing practices, which can negatively impact patients' health and raise the cost of pharmaceuticals<sup>(8)</sup>. However, no prior research has been conducted in Iraq to assess the physician's perceptions of the factors that may influence his decision to accept contact with the MR and accept his products. Likewise, no prior research has been conducted to assess the MRs' perceptions of the physician-MR relationship. Accordingly, this study aims to explore physicians' and medical representatives' perspectives on the criteria of impactful professional marketing and the factors that influence the interaction between physicians and medical representatives.

## Subjects and Method

### Study Design and Sampling

Qualitative in-depth interviews with flexible probing techniques were carried out in 2023. A semi-structured, open-ended interview questionnaire was used to interview physicians and MRs from different private clinics in several governorates in Iraq. Purposive sampling methods were used. Purposive sampling is a non-probability strategy in which the researcher intentionally chooses individuals or elements from a community based on certain criteria or traits. Purposive sampling involves the researcher selecting participants based on their judgement to ensure they possess the necessary information, experience, or skills relevant to the research issue. Each participant identified as a potential respondent was individually asked for verbal consent after being informed about the study's purpose and procedures. The point of relative saturation determined the sample size in this

study concerning the issues being discussed, which looked to be the point at which there was nothing more to learn, and repetition occurred. Saturation in qualitative research occurs when no new information is being uncovered by additional data sources from the participants. Saturation guarantees that the researcher has gathered a sufficient amount of data to adequately tackle the study issues.

### Inclusion criteria

- 1-Physician who registered in Iraqi medical association and who has had a private clinic for at least one year and who receives MR routinely
- 2-Pharmacists who registered in syndicate of Iraqi pharmacists and work as a medical representative for at least one year

### Exclusion criteria

- 1- Any physician in private practice for less than a year or refuses to receive MR.
- 2-Pharmacists who have worked as medical representatives for less than one year.
- 3- MRs from other institutions such as science and medical colleges to prevent bias in their perspectives.

### Data Collection

A semi-structured interview guide was used to elicit participants' demographic data, years of experience, physicians' and medical representatives' perspectives on the criteria of impactful professional marketing, and the factors influencing the interaction between physicians and medical representatives. The first author created the semi-structured interview guide after conducting pilot interviews with many physicians and MRs. The questions were further examined by the other authors. Following validation by a scientific and ethical council in the clinical pharmacy department, the questionnaire was approved utilizing face validation procedures. Interviews were conducted for 25-30 minutes per participant between March and May 2023.

### Ethical approval

The Scientific and Ethical Committee of the College of Pharmacy at the University of Baghdad gave ethical approval. Moreover, verbal consent was obtained from each participant.

### Thematic (Data) analysis

The data obtained during each interview was recorded by writing the participant's response in English on a specific sheet of paper. The principal researcher coded the content using "QDA MINER LITE "v2.0.9; other study authors validated the coding; these codes were used for qualitative data classification. Utilizing a thematic content analysis methodology, the obtained data were analyzed.

Thematic analysis is predicated on statements from participants, subthemes, and themes. The authors utilized the transcripts of the interview recordings to discern recurring themes and subthemes. Illustrative quotations were chosen to provide support for each subtheme. The research

team (comprising two qualitative studies specialists) adhered to the six stages Braun and Clarke (2006) outlined for thematic analysis. The process entails carefully examining the comments, formulating codes, identifying patterns, evaluating these patterns, categorizing and labeling the identified themes, and ultimately documenting the findings<sup>(9)</sup>.

The transcription underwent a cross-verification process by three research team

**Table 1. The interview guide for physician**

No.	Main Questions	Follow-up questions
1	What is your perception of (the medical representative) as a career?	
2	In your opinion, what factors interfere with your acceptance of MR visit?	
3	In your opinion, what are the reasons that make you refuse the visit of a MR.	Is it relevant to the company? or the MR personally
4	According to your opinion, what information does the MR. have to present to the Physician during the visit?	
5	Do you think the MR can play a role in improving the physician's knowledge?	In which way?
6	When a MR visited you for the first time, what were the issues that influenced your decision to invite him back or decline further contact?	
7	What do you need from the medical companies to do for their MR before they start their physician visits?	
8	According to your opinion, what is the future of this career?	

**Table 2. The interview guide for medical representative**

No.	Main Questions	Follow-up questions
1	What is your current perception of (the medical representative) as a career?	What are the factors affecting it and the person's success in it?
2	According to your experience, what factors could interfere with the physician's and MR's relationship?	
3	As a MR, what do you think the company must provide you before visiting the physicians?	
4	In your opinion, what considerations interfere with physician acceptance of MR visits?	
5	What are the considerations that make physicians refuse the visit of a MR?	Are these factors related to the company? Or the MR himself?
6	Do you think the MR can play a role in improving the physician's knowledge?	How?
7	In your opinion, what is the future of this career?	

## Results

The study included ten physicians, five male and 5 female, with a mean age of (48.3±13.1) years, mean years of experience (13.3 ±13.8), and mean number of MR visits (6.8± 4) per week. The demographic characteristics are presented in Table 3. In addition, ten MRs all have bachelor's degrees in pharmacy. The mean age of all MRs was 25.3±1.396 years, and the mean years of

members. The study employed a qualitative approach, utilizing an inductive analytic methodology led by data. It adhered to a constructivist<sup>(10)</sup>. The authors developed the themes by analyzing the recurring patterns seen in the participants' responses. Subsequently, the findings were validated by three instances of peer checking.

experience was 2± 1.05. The mean number of weekly physician visits was 33.3±7.97, and the mean percent of rejection was 21.6± 9.83, as seen in Table 4.

### Study themes

The themes obtained in this study from the physicians are shown in Table 5, while those for pharmacists are shown in Table 6.

**Table 3. The characteristics of the participating physicians**

No.	Participant	Gender	Age years	Qualification	Specialty	Years of experience	No. of MR visits/week
1	Physician 1	Female	39	Medical Board	Iraqi board of internal medicine	5	4
2	Physician 2	Male	69	Diploma	pediatrician	38	13
3	Physician 3	Male	36	Medical Board	Pediatrician	3	4
4	Physician 4	Female	55	Medical Board	Neurology	25	4
5	Physician 5	Male	37	Medical Board	Rheumatology	3	5
6	Physician 6	Male	41	Medical Board	Neurosurgery	5	14
7	Physician 7	Female	40	Medical Board	Clinical Nutrition	7	10
8	Physician 8	Male	59	Medical Board	General surgery	5	3
9	Physician 9	Female	68	Medical Board	Gynecologist	35	5
10	Physician 10	Female	39	Medical Board	General surgery	7	6

**Table 4. The characteristics of participating in medical representatives**

No.	Participant	Age	Gender	Qualification	Experience	No. of visit	percent of rejection
1	MR (1)	25	Male	Bachelor	1	40	40
2	MR (2)	24	Male	Bachelor	1	40	20
3	MR (3)	26	female	Bachelor	1	45	20
4	MR (4)	27	Male	Bachelor	3	33	20
5	MR (5)	25	Male	Bachelor	4	25	20
6	MR (6)	24	Male	Bachelor	1	40	20
7	MR (7)	25	Male	Bachelor	2	25	30
8	MR (8)	26	Male	Bachelor	2	36	6
9	MR (9)	27	Male	Bachelor	3	25	10
10	MR (10)	23	Male	Bachelor	2	24	30

**Table 5. Themes and subthemes from physicians**

Perception of the physician about MR	Valuable and required career
	Profit maximization for pharmaceutical companies
	It is just a promotion of medicines.
Factors interfere with physician acceptance of MR visit	Number of patients in the clinic of patients
	Insufficient time
	The quality of the company
	the benefits of any new medications to his patients
Several reasons to refuse the visit	If a new or unknown company
	Use twisted methods to promote
	Time-consuming when MR speaks a lot
	The medication has no additional advantages.
	low experience of the MR
	high cost of medication
Information that is preferable to be clarified by MR during the visit	The physician never refused a visit.
	sobriety of the company
	price of the drug
	advantages of his drug
Role of MR in improving physician knowledge	Any recent studies about the diseases and medications
	availability of drugs in pharmacies
	No role
	Increase the knowledge of new medications or formulations.
Several factors influenced the physician's decision to invite MR for a second visit.	Only the scientific MR improves the knowledge.
	Information MR provides
	Approaches used for promotion
	Follow the promotion ethics.
	the effectiveness of his medication on patients

Continued table 5.

Several requisites from pharmaceutical companies to prepare their MRs	Excellent communication skills
	Professional promotion techniques
	Ethics of Promotions
	Recruiting medical staff only
	updated information studies on medications
Variable views on the future of MR occupation	Promising future
	Highly competitive occupation
	Ambiguous view
	The importance will be declined in the future.
	Need more organization to be profitable.

Table 6. Themes and subthemes from medical representatives.

Main theme	Subthemes
Perception of MR on his career	It is a promising career.
	Play a vital role in the promotion of medications.
	Enhance the link between the physician and the patients.
Several factors affect the relationship between the physician and MR	If the MR was for the brand company
	Receiving gifts from MR
	Persuasion skill of the representative
	Physician personality
	Previous relations in the public sector
	The scientific knowledge of the representative
The needed role from the pharmaceutical companies toward their MR	Provide them with free samples
	Updating their Scientific data
	Provide them with effective training in communication skills.
	Provide them with essential tools like Brochures.
	Provide them with effective training on selling skills.
Several considerations interfere with the physician's acceptance of an MR visit	benefits or gifts he received
	The nature of company (brand or generic)
	Personality of MR
	The presence of a more reasonable competitor
	Negative feedback about the product
	Negative feedback on MR of the company
Reasons behind the rejection of physicians to the visit of the MR	Busy physicians
	Failure of MR to communicate effectively in the previous visit
	New companies
	If he has not received a gift
	Previous bad experience with a product
	Previous problem with the company
	Some physicians refuse all visits from any MR.
	The physicians' secretary relationship with the MR
MR can improve physician knowledge on two points	Help the physician to distinguish new or effective medications
	Provide physicians with recent studies and research.
the future of the pharmaceutical promotion (PP)	Weakened due to the huge number of companies
	Optimistic view
	Scientific advancements are necessary to enhance its functionality.
	Unknown or unclear view

**A-Themes obtained from physicians.****Perception of the physician about MR**

Half of the interviewees felt that PP was a beneficial profession. Four interviewees believed that the primary objective was to maximize the financial gains for pharmaceutical companies. Only two believed it was merely a promotional tactic for pharmaceuticals.

"Pharmaceutical media play a critical role in informing physicians about the latest developments in the field of medicine" [Physician 3, male, 36years]

**Factors interfere with physician acceptance of MR visits.**

Most physicians stated that the number of patients in the clinic of patients and the obtained benefits of the medication were the most important factors interfering with physician acceptance of MR visits. Five physicians stated that the company's quality was important, while only four believed insufficient time was the main factor.

"The factors that have the greatest impact on the acceptance of medical representatives' visit are the number of patients in the clinic of patients through the clinic and the lack of time to conduct their visits." [Physician 1, female, 39 years]

**Reasons to refuse the visit.**

Four physicians refused the visit if the MR was from a new or unknown company. Three of them said they always refuse the visit if the MR uses twisted methods for promotion. Other reasons are stated in Table 5.

"I inquire specifically about the efficacy of medications, particularly the advantages of new therapies to my patients. If I have any uncertainty over that, I decline the visit." [Physician 10, female, 39 years]

**Information provided by MR during the visit.**

The majority requested the advantages of the drug (eight participants), and four requested to know the price of the drug in comparison with competitors. Half the physicians want to know about recent studies about diseases and medications. Three stated that they need to know the availability of the drug in most pharmacies. Only two were interested in the sobriety of the company.

"I request him to furnish me with the latest research on the disease, the currently marketed therapy, and the updated findings on its efficacy. Additionally, it is crucial to consider the drug's accessibility in local pharmacies and its affordability." [Physician 10, female, 39 years]

**Role of MR in improving physician knowledge**

Six physicians acknowledged that MR could contribute to enhancing their knowledge of drugs. However, three believe this role is limited to scientific MR rather than encompassing all MR. Only one held the belief that MR was not implicated in this matter.

"Indeed, if the medical representative can effectively communicate medical facts using a rigorous scientific approach, they can certainly enhance the physician's knowledge." [Physician 9, female, 35 years]

**Several factors influenced the physician's decision to invite MR for a second visit.**

Approaches used for promotion (six participants), the effectiveness of his medication on patients, and Information provided by MR (Four participants for each) were the main factors that influenced the physician's decision to invite MR for a second visit.

"The primary factor that led me to agree to a second visit was the pharmaceutical representative's skilled conversational techniques, promotional strategies, and adherence to professional ethics in their promotional efforts." [Physician 1, female, 39 years]

"When he persistently and repetitively urges me to prescribe the medication or product, I decline to schedule another appointment." [Physician 2, male, 38 years]

**Several requisites from pharmaceutical companies to prepare their MRs.**

Half the physicians asked companies to learn the MR professional promotion techniques and updated medication information studies. Four physicians requested excellent communication skills and ethics of promotions. Additionally, three companies requested to recruit medical staff only.

"Medical companies must offer comprehensive and proficient training for their Medical Representatives, particularly in communication skills and scientific knowledge about their medications." [Physician 9, female, 35 years].

**Variable views on the future of the MR profession.**

Four physicians hold a positive outlook regarding the future of medical advertising. However, three individuals held the belief that this occupation was very competitive and required enhanced organization to yield profitability. Only one person holds an ambivalent perspective and believes that the significance will diminish in the future.

"In my opinion, this profession has promising prospects, provided that medical companies prioritize scientific advancement and patient well-being" [Physician 9, female, 35 years]

"In my opinion, the future of the pharmaceutical industry in Iraq appears dark due to the alarming proliferation of pharmaceutical companies and the abundance of medical representatives in the field. This has resulted in intense competition among them for the same product" [Physician 2, male, 38 years]

**B-Themes obtained from MR.****Perception of MR on his career**

Six MRs believed that PP enhanced the link between the physician and the patients. While three of them thought it plays a vital role in promoting

medications. Two MRs said that it is a promising career.

"This profession plays a crucial role in the promotion of pharmaceutical items to doctors and pharmacists, with the ultimate goal of aiding the patient. Nevertheless, the contemporary state of the profession is adversely impacted by two significant factors: the proliferation of several companies and the lack of drug promotion regulation. Numerous unlicensed and untested companies also populate the Iraqi medication market." [ MR. 3, female, 26 years]  
**Several factors affect the relationship between the physician and MR.**

The scientific knowledge of the representative was the most important factor, according to eight participants. Both the persuasion skills of the representative and receiving gifts from the MR were selected by the six of MR. Four MRs believed that working with the brand company was an important factor. Only three thought that the Physician's personality or the presence of previous social or work relations in the public sector with the physician was an important factor.

"From my perspective, several aspects are associated with the doctor's own attributes. For instance, some doctors are satisfied with the representative's scientific knowledge and can easily change to a new brand. In contrast, others persist in prescribing medications for an elderly representative who places trust in him due to the representative's persuasive abilities, professional expertise, experience, and effective communication with the doctor. Furthermore, the act of receiving gifts or offers enhances the bond between the representative of the company and the doctor for certain companies" [ MR. 1, male, 25 years]

**The needed role from the pharmaceutical companies toward their MR**

Eight MRs need the company to improve the scientific data about advertised medications. Seven participants needed effective training in communication skills. While only one MR needs the company to provide them with free samples, essential tools like Brochures, or effective training on selling skills.

"it is imperative that the representative undergoes rigorous scientific training on the company's products, including in-depth knowledge of the specific product being promoted, sales techniques, work environments, and effective communication skills with physicians or other individuals" [ MR. 3, female, 26 years]

**Several considerations interfere with the physician's acceptance of an MR visit.**

According to the view of seven MRs, the nature of a company (brand or generic) was the most important factor that affected the decision to accept the visit by a physician. Four MRs believed that the presence of a more reasonable competitor and the physician's effective utilization of this competition

caused him to refuse any visit. Three participants believed that the decision to visit acceptance is related to the benefits or gifts they received or the personality of MR. One MR viewed negative feedback regarding the product or the company as a consideration that could affect the visit acceptance.

"I believe it depends on how MR presents his work and whether he is professional or not, if he dresses appropriately for this field, whether he knows what he is saying, and whether he understands the doctor's demands." [ MR. 4, male, 27 years]

"Doctors' fear of new companies and the extent of their medications' effectiveness, as well as a large number of pharmaceutical companies, particularly those that have not been tested in the Iraqi market; also, doctors' loyalty to certain companies because he trusted or benefited from them." [ MR.10, male, 23 years]

**Reasons behind the rejection of physicians to the visit of the MR**

Failure of the MR to communicate effectively in the previous visit can lead to rejection of the second visit, according to the view of five MRs. According to four MRs, if the physician is busy or the company is new, this sometimes leads to the physician's rejection. According to three MRs, the physician declined the visit if he had not received a gift from the company, had a prior negative experience with a product, or had a prior argument with the company. Some physicians refuse all visits from any MR, or sometimes the physicians' secretary relationship with the MR contributes to the decision of rejection according to the view of one MR.

"If the MR displays an unprofessional manner, fails to deliver relevant information to the doctor, or is not qualified to engage in scientific conversations with doctors during his prior visit, the doctor will deny any further visits. However, few doctors request gifts or trips, and those who do usually refuse any companies that do not make such requests." [ MR. 3, female, 26 years]

"In certain instances, rejection is not attributable to the MR or the company; for example, the company may be well-known, and the doctor may refuse the visit because he was too busy. In other cases, the doctor may even be opposed to the idea of meeting the representative. Consequently, each doctor possesses a unique key that enables him to accept the visit." [ MR. 1, male, 25 years]

**MR can improve physicians' knowledge on two points.**

Two MRs believed that MR could assist the physician in differentiating new or effective medications. In comparison, eight MRs stated that MR could enhance physicians' knowledge by providing them with recent studies and research.

"Undoubtedly, MR has the potential to significantly contribute to advancing physician knowledge by disseminating current papers and

research findings, which, if effectively conveyed to physicians, could enhance their professional experiences. Additionally, physicians will regard MR as a medical advisor and rely on him for any newly prescribed medications and information if they believe in him." [ MR. 4, male, 27 years]

### ***The future of pharmaceutical promotion as a profession***

In contrast to physicians' perspectives, the three MR views posit that this occupation may experience a decline in significance or that its future remains uncertain due to the proliferation of companies compelling physicians to decline a substantial quantity of MRs. Two participants showed an optimistic view and thought that scientific advancements are necessary to enhance their functionality.

"This career offers great promise and growth opportunities since pharmacists can rise from being MR to team leaders, sales supervisors, and ultimately company managers. Besides, the Iraqi market is undergoing growth and expansion, with the Iraqi citizens exhibiting significant purchasing capacity. Additionally, the country has a substantial presence of doctors and pharmacies. This fosters an ambiance of progress." [ MR. 3, female, 26 years]

"Unfortunately, the PP profession in Iraq is experiencing a decline from now to the future due to the alarming rise in the number of companies and the inadequate training of medical representatives, which negatively impacts the profession's reputation." [ MR. 6, male, 24 years].

## **Discussion**

Physicians and PP have been a topic of debate for many years. Some argue this can lead to false or deceptive claims, potentially encouraging inappropriate healthcare utilization<sup>(11)</sup>. These claims are affected by the physician's interactions with medical representatives, which have both positive and negative aspects<sup>(12)</sup>.

The current study showed that half of the physicians felt that PP was a valuable profession. Nevertheless, diverse perspectives on PP were found among physicians in prior research. Some physicians believed that promotion could provide beneficial information<sup>(13)(14)</sup>. At the same time, other physicians in alternative research argue that promotion and marketing have no function in operating and managing professional services<sup>(15)</sup>.

Regarding the MRs' overviews about medical advertising, the current study showed that most MRs were satisfied with their job and believed that PP is a promising career and has a good future because it could play an important role in promoting medications. It will also enhance the relationship between the physician and their patients.

Several previous studies suggest that PP is seen as a promising career with a good future, as it

is believed to have a place in the future of healthcare services. For example, the medical professionals in the studies conducted by Moser and Riecken & Yavas expressed favorable attitudes toward promotion<sup>(16)(17)</sup>. One study showed that health professionals believed that promotion provides useful information to the public and that it is proper for physicians to advertise<sup>(18)</sup>.

If well devised and deployed, promotion offers healthcare providers opportunities to dramatically improve their fortunes by successfully engaging patients and building market share<sup>(19)</sup>. According to the MRs' overviews of the determinants influencing relationships between the physician and MR, forty percent indicated that the brand company would contribute to improving their relationship. Also, over half believe that receiving gifts will significantly impact their relationship. Similarly, in a study by Balhara *et al.*<sup>(20)</sup>, 47% of the subjects reported that accepting a gift from a pharmaceutical company would affect a clinician's decision. The current study also showed that communication skills and scientific knowledge of the MR are very important in convincing the physician.

A prior investigation has established that the relation and exchange of information between physicians and medical representatives is predicated upon the scientific knowledge of the medical representatives, which serves as the shared reservoir of pharmacological information<sup>(21)</sup>. Furthermore, physicians' attitudes towards medical representatives may also be influential, as evidenced by numerous physicians engaging in positive interactions with them and welcoming their visits<sup>(22)</sup>.

The involvement of pharmaceutical companies in training medical representatives is vital<sup>(23)</sup>. Medical representatives must possess a wide range of competencies, expertise, and emotional composure to communicate with healthcare professionals in an effective manner<sup>(24)</sup>. Our finding regarding the role of companies concerning their MRs indicated that most physicians expressed interest in knowing both the price and advantages of the medication compared to competitors. Fifty percent of physicians are interested in recent research concerning medications. However, only a minority of respondents indicated they require information regarding the drug's availability at most pharmacies. In addition, our findings also indicated that 80% of MRs need their company to maintain the update of their scientific data to interact with physicians effectively. Additionally, over half of the MRs believe that the company must give adequate training in communication skills for their MRs, recognizing the importance of these abilities in this profession. Pharmaceutical companies should provide adequate training for medical representatives to enhance their scientific and



product expertise. The significance of this training cannot be overstated, as it empowers medical representatives to impart precise information regarding pharmaceutical products and communicate effectively with physicians<sup>(25)</sup>. In addition, medical representative work is hazardous and demanding, necessitating expertise, knowledge, and emotional fortitude<sup>(26)</sup>.

Regarding the considerations that interfere with the physician's acceptance of an MR visit and according to the physicians' overviews, the primary factors impeding physician acceptance of MR visits, as indicated by most physicians, are the patients' number of patients in the clinic, the benefits derived from the drug and the impact of the company's quality. In contrast, this study showed that 70% of MRs found that the acceptance of the visits depends mainly on the company, whether it is brand or generic; less than half found that the personality of the physician and the presence of a more reasonable competitor will influence their visits. In comparison, according to a Jordanian study by Al-Thabbah *et al.*, physicians' acceptance of MR visits can be influenced by factors such as product quality, safety, effectiveness, price, availability, and company reputation<sup>(27)</sup>.

Regarding the reasons behind the rejection of physicians to visit the MR, the findings indicated that physicians tend to refuse visits if the MR worked with a new or unknown company. Additionally, visits were also refused if the MR employed deceptive tactics for promotional purposes.

However, 50% of MRs believed that failure to communicate effectively with the physician during the previous visit was the main cause of rejection. Less than half found that some physicians would refuse the visit because they did not have time or maybe the company was new.

A prior study conducted in Yemen found that physicians usually hold positive views about engaging with MRs and do not favor prohibiting MR visits. The main reason for refusing to see an MR would be the inappropriate time of a visit<sup>(12)</sup>. Indeed, most physicians believe that most promotional approaches do not present ethical dilemmas and consider it permissible to accept promotional materials<sup>(21)</sup>.

Regarding improving physician knowledge, 80% of MRs see they can improve it by providing information about recent studies. In numerous developing nations, this remains the case: the MR remained the primary source of information, particularly concerning novel drugs<sup>(28)</sup>. Most pieces of literature agree that MRs provide partial information on medicines<sup>(29,30)</sup>.

Concerning the future of this profession, four physicians are optimistic about the future of medical advertising. Nevertheless, three individuals maintained the conviction that this profession was

very competitive and necessitated improved organization to achieve profitability. Conversely, a mere 20% of MRs expressed optimism regarding their views, whereas 30% of MRs speculated that it might be a weekend due to the vast number of companies in the Iraqi market. In the last decade, physicians' attitudes towards promotion have shifted, with greater adoption of promotional activities and the use of marketing techniques as standard medical practice, according to a survey by Siddiqi *et al.*<sup>(31)</sup>. This indicates a change in physicians' perception of and a growing recognition of its potential benefits. However, it is important to note that there are still concerns about the impact of promotion on the doctor-patient relationship and the quality of healthcare<sup>(14)</sup>.

### Limitation of the study

A significant constraint of the study was its inability to extrapolate the findings due to the qualitative nature of the research. The study only included MRs who were pharmacists and excluded those from other institutions to prevent bias in their perspectives.

### Conclusion

The nature of the physician-MR relationship may be influenced by various factors and considerations. Some of these were associated with the company itself, which ought to have equipped MRs with proficient scientific expertise and effective communication skills. The increasing number of generic medications, the presence of numerous medical companies, and the inadequate training of MRs all contribute to the complexities of MR's job and potentially have a negative impact on the future of medical advertising.

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### Ethics Statements

The Scientific and Ethical Committee of the College of Pharmacy at the University of Baghdad gave ethical approval. Moreover, verbal consent was obtained from each participant.

### Author Contribution

The authors confirm contribution to the paper as follows: study conception and design: 1<sup>st</sup> Author, ; data collection: All authors; analysis and interpretation of results: 1<sup>st</sup>, 3<sup>rd</sup> and 4<sup>th</sup> Authors; draft manuscript 1<sup>st</sup> Author. All authors reviewed the results and approved the final version of the manuscript.

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## تفاعل الطبيب والمندوب العلمي للأدوية في القطاع الخاص العراقي: دراسة نوعية

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### الخلاصة

تخصص شركات الأدوية ميزانية لأنشطة الدعاية العلمية للأدوية تهدف إلى تغيير عادات وأراء الأطباء لاختيار الأدوية الأنسب لمرضاها، مما يؤدي في النهاية إلى زيادة مبيعاتها. أهداف البحث كانت استكشاف وجهات نظر الأطباء ومندوبي الأدوية حول معايير العلاقات العامة المهنية المؤثرة والعوامل التي تؤثر على التفاعل بين الأطباء ومندوبي الأدوية. أجريت مقابلات عميقة نوعية باستخدام تقنيات الاستقصاء المرنة في عام 2023. تمت استخدام استبيان مقابلة مفتوح شبه منظم لمقابلة الأطباء ومندوبي الأدوية من عيادات خاصة مختلفة في عدة محافظات في العراق. شارك عشرة أطباء وعشرة مندوبي أدوية في هذه الدراسة. بالنسبة للأطباء، كانت الدعاية الصيدلانية مهنة مفيدة. كان عدد المرضى المراجعين للعيادة والمزايا التي يحصلون عليها من استخدام الدواء أهم العوامل التي تتداخل مع قبول الأطباء لزيارات ممثلي الأدوية، وعادةً ما يرفضون الزيارة إذا كان المندوب من شركة جديدة أو غير معروفة. طلب الغالبية منهم الحصول على تحديثات حول مزايا الدواء والسعر والدراسات الحديثة حول الأدوية. فيما يتعلق بأراء المندوبين، يعتقد معظم المندوبين أن مهنة دعاية الأدوية تعزز العلاقة بين الطبيب والمريض. كانت المعرفة العلمية للمندوب أهم عامل يؤثر على العلاقة مع الطبيب. لذلك، يحتاج معظم مندوبي الأدوية إلى أن تحسن الشركة بياناتها العلمية حول الأدوية التي يتم الإعلان عنها ومهارات التواصل لديهم. وكذلك كانت طبيعة الشركة (شركة ذات علامة تجارية معروفة أو شركة غير معروفة) هي العامل الأكثر أهمية الذي أثر على قرار قبول زيارة المندوب للطبيب. بالإضافة إلى إذا كان الطبيب مشغولاً أو كانت الشركة جديدة، فهذا يؤدي أحياناً إلى رفض الطبيب أقر كل من الأطباء وممثلي الأدوية بأن مندوبي الأدوية يمكن أن يعززوا معرفة الأطباء بالأدوية. ومع ذلك، يعتقد البعض أن هذا الدور يقتصر على مندوبي الأدوية العلميين وليس كل المندوبين. وكان الاستنتاج النهائي للدراسة ان طبيعة العلاقة بين الطبيب والمندوب قد تتأثر بعوامل واعتبارات مختلفة. بعض هذه العوامل مرتبطة بالشركة نفسها، والتي يجب أن تكون قد زودت مندوبيها بخبرة علمية كافية ومهارات تواصل فعالة. كما بينت الدراسة ان العدد المتزايد من الأدوية ووجود العديد من شركات الأدوية والتدريب غير الكافي لمندوبي الأدوية تساهم جميعاً في تعقيدات عمل ممثلي الأدوية وقد يكون لها تأثير سلبي على مستقبل الدعاية الدوائية.

الكلمات المفتاحية: الطبيب، المندوب العلمي الدوائي، دعاية الادوية، الصيدلي، التحديات.