RESEARCH ARTICLE

Incentive-linked prescribing and the plights of patients: a qualitative study in Pakistan

Muhammad Naveed Noor[1], Zahida Azizullah[2], Haider Safdar Abbasi[3], Nina van der Mark[4], Afifah Rahman-Shepherd[5], Amna Rehana Siddiqui[6], Mishal Sameer Khan[7], Rumina Hasan[8], Sadia Shakoor[9]

Abstract

Objective: To examine the perceived impact of incentive-linked prescribing (ILP) on the everyday lives of patients in Pakistan.

Methods: Adopting a qualitative approach, in-depth interviews were conducted with 26 patients in Karachi. A convenient sampling method was used to recruit patients from different pharmacies located in all six districts of Karachi namely East, West, South, Central, Korangi, and Malir. The interviews were thematically analyzed using the software NVivo Version.12.

Results: ILP was perceived to affect patients in three interrelated ways: financial difficulty, mental distress, and difficulty in adhering to medical treatments. Most of the participants reported experiencing financial difficulties and were unable to afford everyday household needs. ILP was believed to make physicians prescribe expensive brands, which in turn, added to patients' financial difficulties. Due to expensive medications, some patients stopped seeking healthcare from physicians and instead relied on home remedies. ILP-related financial burden on patients was also perceived to be a contributor to their mental distress.

Conclusion: Patients are increasingly becoming aware of physicians' engagement in ILP, and believe it harms them in different ways. It has important implications for physicians' reputations in society. Physicians must adhere to the principles of patient-centred care by avoiding ILP.

Keywords: Incentives, physicians, patients, pharmaceutical companies, healthcare, patient-centered care, Pakistan

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Introduction

Incentive-linked prescribing (ILP) is a practice whereby physicians may prescribe specific pharmaceutical brands in exchange for certain incentives.[1] Money, clinical equipment, items for home and clinic renovation, and travel sponsorships are some of the most cited incentives in the literature.[2] According to a survey, 40% of pharmaceutical sales representatives reported that physicians demanded expensive items from them in exchange for prescriptions in Pakistan.[3] Factors such as the desire for profit maximization and aspirations for a higher standard of living can lead to the establishment of financial ties between physicians and pharmaceutical companies.[2] The absence of clear guidelines on professional ethics in medical practice and weak regulatory controls can further mediate the process of pharmaceutical incentivisation.[4]

[1-3,8,9]Department of Pathology and Lab Medicine, Aga Khan University, Karachi, [4,5,7]Department of Global Health and Development, London School of Hygiene & Tropical, Medicine, London, UK, [6]APPNA Institute of Public Health, Jinnah Sindh Medical University, Karachi, Pakistan

Correspondence: Muhammad Naveed Noor. **Email:** naveed.noor@aku.edu

ORCID ID: 0000-0002-7847-6637

The Drug Regulatory Authority of Pakistan (DRAP) recently issued a notification for physicians to prescribe medications with generic names, the practice of prescribing medications with brand names still prevails.[5] The ability to prescribe medications with brand names, in the context of low health literacy among patients and weak regulatory controls, can pave the way for physicians' engagement in ILP. Once physicians begin to receive incentives, they are obliged to prescribe medications from specific companies, without considering efficacy and price.[2]

In Pakistan, more than 80% of healthcare is sought from the private sector, largely composed of private general practitioner clinics.[6] Additionally, out-of-pocket healthcare spending in the country is about 58% due to the failure of the public sector to provide efficient healthcare.[6] In the context of sustained poverty rates and rising inflation, the cost of healthcare may exacerbate patients' financial troubles. While financial deals between patients and pharmaceutical companies are made secretly, the increase in patients' awareness about pharmaceutical incentivization has been noted in many parts of the world.[7] In a recent study in Pakistan, patients believed that ILP was an unethical practice and named

incentive types that physicians may receive from pharmaceutical companies. Patients also noticed how pharmacies could become a bridge between physicians and pharmaceutical companies in managing sales and commissions.[7] Patients are seen to have a lack of trust in physicians who establish financial ties with pharmaceutical companies, which may result in their delay in seeking healthcare or underutilizing health services.[8]

Despite considering ILP as an unethical practice, physicians often justify it, as a way to overcome financial constraints.[9] However, information on the financial difficulties that patients face in their everyday lives and the extent to which ILP may exacerbate those difficulties is limited. Embedded in our larger research programme on conflicts of interest arising from pharmaceutical incentivisation, this study examines the patient perceptions of the effects of physicians' engagement in ILP in Pakistan.[7]

Methods

This study was conducted in Karachi between May and August 2023. A qualitative approach was adopted to gather information about the perceived effects of ILP on patients.

Adopting a convenient sampling method, we recruited patients from various pharmacies located in all six districts of Karachi, namely East, West, South, Central, Korangi, and Malir.[10] Two research specialists (HSA and ZA) approached patients who visited pharmacies to purchase medications and advertised the study. Those who were willing to participate were taken to the nearby agreed-upon food outlets to conduct in-depth interviews. A written consent was obtained from all 25 study participants before interviewing them.

The interview guide was developed based on our previous research with physicians, pharmaceutical company representatives, and policy actors, published literature on patient perceptions and the effect of incentive-linked prescribing, and pilot interviews.[2,4,7,8] The qualitative interview guide had five main sections: demographics, introductory questions, conflict of interest in medical practice, polypharmacy, and patient difficulties. All the interviews were audiotaped and lasted between 45-60 minutes. All the interviews were conducted in Urdu language. Two team members (HSA and ZA) translated and transcribed the interviews, under the supervision of the lead researcher (MNN). The transcription and translation of the interviews by the research team also ensured patients' confidentiality and anonymity.

Data were analyzed using NVivo Version.12. A thematic analysis was performed to identify various themes and subthemes. The development of the thematic analysis framework was equally literature- and data-driven. We initially coded the interview data by the study aims and questions. This preliminary coding frame was then reviewed and reorganised by the lead researcher (MNN) based on recurring topics/themes in the extant literature on patient perceptions of physicians' engagement in ILP. Our scoping review of research acted as a key guiding document to reorganise the coding frame.[7]

Ethics approval was obtained from the Aga Khan University (# 2023-6781-24651), the London School of Hygiene and Tropical Medicine and the Pakistan National Bioethics Committee (# 4-87/NBC-582/21/1364).

Results

In this study, 20 male and 5 female primary care patients participated. Six participants attended school, 05 participants had college-level education, 11 participants held university degrees, and 03 participants had no education. Most participants had a low-income threshold, as 04 participants were manual workers, 06 participants had low-salaried jobs, 07 participants were self-employed, 04 participants were students, and 04 participants did not have jobs. The analysis of the interviews suggests that a majority of participants had some information about the financial relationship between private doctors and pharmaceutical companies. Participants spoke of several ways in which ILP could affect them in their everyday lives, a detailed description of which is given in the following subsections.

ILP exacerbates patients' financial troubles

Most of the participants believed that physicians might end up prescribing expensive medications to patients in exchange for incentives from pharmaceutical companies. Even though participants did not witness doctors making financial deals with pharmaceutical companies, they held this belief due to how this relationship is typically perceived in society:

"There is a common perception that doctors are linked to pharmaceutical companies. They may prescribe expensive medications to patients so that they can get commissions. They may not necessarily charge higher fees to patients because prescribing expensive medications (financially) works for them". (P12)

"A few participants, however, spoke about how they detected whether their physicians had a financial relationship with pharmaceutical companies:

I presented my prescription to a pharmacy inside a

hospital, but the medications that the doctor prescribed were not available there; I could get them from a pharmacy outside the hospital. They were not low-priced". (P5)

Most of the participants reported experiencing financial difficulties to the extent that they were unable to afford everyday household needs:

"My eldest child is 15 years old now, and I am unable to provide for his education due to financial problems. Initially, I put him in a school, where he completed his Grade 2, but then I had to take him out of the school because I did not have enough money to support his education". (P19)

One male participant mentioned, if he had to buy expensive medications, and had limited money, he would reduce food consumption:

In case of buying expensive medications, I would spend less on food and try to avoid buying unnecessary things. (P13)

ILP, a barrier to seeking healthcare

Almost all the participants believed that ILP could significantly impact patients financially. They thought physicians were obliged to help pharmaceutical companies achieve sales targets through prescriptions so that they could accrue benefits. Therefore, physicians might ignore patients' financial status and might prescribe unnecessary or expensive medications to them. Some participants reported that if they could not afford to buy prescribed medications, they stopped seeking healthcare, until their health problems became serious:

"In a time of increased inflation, managing household expenses has become challenging. If any health problems arise, they can worsen people's financial circumstances. People therefore often delay seeking healthcare and only go to doctors when their health problems become serious. Take my example; I had been having pain in my hands for some reason, but I kept avoiding seeing a doctor. I finally decided to visit a doctor when I could not bear the pain anymore". (P7)

"There are many examples from the past when I had no money in my pocket and could not buy the needed medications. If I face such situations, I stop taking medications". (P10)

As an alternative way to treat themselves, a few participants ended up relying on home remedies:

"On several occasions, I continue to suffer pain when I cannot afford to buy medications. Some five or six months ago, I had a health complication. Although I went to a local hospital, it did not help. The doctor I saw recommended that I go to another hospital to see a specialist, but I could not avail it because I did not have money to pay ten thousand rupees for my treatment. All I did was rely on home remedies. It took some time, but I got better eventually". (P13)

ILP can contribute to patients' mental distress

Most of the participants expressed that they often experience mental distress due to financial constraints. Limited income, joblessness, and growing household needs were discussed as reasons for participants' mental distress. Many participants spoke about how their level of mental distress could increase if they or their dependents needed medical treatment due to the cost associated with it. One participant described how his mental distress due to financial difficulties, could also affect his family life:

"I am not mentally okay even today. When I woke up this morning, I told my wife that I was depressed, and I was feeling like my head would explode. Looking at my household circumstances makes me feel the worst. I wish I had escaped all this, but I cannot leave my wife and children on their own because they are my responsibility. Due to my mental health, I feel my physical health is also deteriorating. Sometimes, I have arguments with my wife. She does not even know why I am creating this mess". (P19)

Despite being mentally distressed, participants looked for other ways to generate income. One participant, for instance, mentioned to work for extra hours so that he could meet his family's needs:

"My children are my priority. Taking care of their needs is my responsibility. I put extra time at work; 10-12 hours/day, so my children remain happy and healthy". (P15)

Discussion

This article presents a detailed qualitative analysis of the difficulties patients might face because of physicians' engagement in ILP. Approximately 35% of Pakistan's population lives below the poverty line, set at US$ 3.20. For individuals facing financial constraints, accessing healthcare can pose a significant financial challenge, considering that nearly 80% of primary healthcare services are provided by for-profit private healthcare facilities. This reliance on private healthcare often translates to higher out-of-pocket expenses for patients.[11] Most of the participants in this study also came from poor backgrounds and believed that ILP could exacerbate their financial difficulties because it required physicians to

prescribe promoted medications, even when less expensive alternatives are available in the market. In other words, ILP may not be a standalone factor causing poverty/financial difficulties, but it has the potential to increase patients' and/or their families' financial difficulties.

The WHO also recognises that in many low and middle-income countries, more than 50% of the medication-related harm is caused at the prescribing/dispensing stage.[12] ILP can also be considered medication-related harm to patients (for exacerbating their financial difficulties) and to the healthcare system (for the reduction in trust in healthcare providers), which could be prevented through enforcing strong regulations. Studies suggest that physicians' credibility is reduced if patients feel physicians' prescribing practices are biased.[8,13,14] A lack of trust in physicians can also affect patients' adherence to medical treatment. Our study also shows that patients might stop taking medications or visit physicians if they doubted physicians' engagement in ILP.[14,15]

The study findings about how patients think about ILP and its connection to polypharmacy also strengthen calls for patient-centred care. Patient-centred care revolves around physicians' thorough assessment of patients' reasons for the visit, an understanding of patients' life worlds, particularly their lifestyle and the socioeconomic conditions patients are surrounded by their emotional needs, and patients' knowledge enhancement.[16] The exposition of daily struggles by patients and the extent to which ILP could exacerbate them in our study indicates physicians' violation of the core principles of patient-centred care.

Research suggests that in Pakistan, physicians may perceive themselves as superior compared to patients based on their knowledge and skills in medicine. "A down-to-earth approach would work for patients", "patients don't mind harsh conversations with doctors", and "patients know nothing" are a few keywords taken from physicians' interviews in a recent qualitative study in Pakistan, showing their perceptions of superiority.[17] However, contrarily, patients in Pakistan may have a reasonable understanding of how ILP happens and how the presence of branded items in physicians' offices, and the prescription of medications that could be obtained from specific pharmacies could indicate their possible financial deals with pharmaceutical companies.[7] The detection of ILP, the realization of the price associated with the prescribed medications, and patients' existing financial difficulties, may erode the respect and recognition of physicians in society. There is evidence that patients are less likely to see physicians who are believed to take incentives from pharmaceutical companies.[18] This is consistent with our study results, as a few patients reported preferring self-medication and home remedies for their health problems over seeing physicians, due to the fear of financial exploitation.

The financial deals and negotiations between physicians and pharmaceutical companies are also no longer a secret in academic and policy domains. A recent study from Pakistan used a new covert method to assess physicians' reactions to incentivisation offers by pharmaceutical sales representatives. Despite several limitations, this study identified various outcomes for physicians being offered incentives: acceptance, rejection, and undetermined responses by physicians. This means that ILP is gaining significant attention in the country and that new methods are in the process of being developed to detect/assess it[19] Similarly, there has been a great deal of media attention about ILP in the country in the last two years. Prominent health journalists from media outlets such as Dawn and The News have begun to write articles, and as a consequence, the federal government has placed a ban on pharmaceutical sponsorships for physicians travelling for conferences.[20,21]

We also note that there is an absence of clear guidelines on professional ethics in medical practice. We suggest that the Pakistan Medical and Dental Council and provincial healthcare commissions develop these guidelines and help physicians recognise conflicts of interest arising from pharmaceutical incentivisation. In 2021, the DRAP introduced new rules about ethical drug promotion.[22] However, their implementation has been a challenge. It is needed that mechanisms are devised to ensure the implementation of these rules so that the chances of incentivisation offers from pharmaceutical companies are minimised.

Our study was limited to one city in Pakistan. A large survey-based study with a representative sample from all four provinces will give more insight into patients' perceptions of ILP. A study like this will have great potential to not only make physicians know the seriousness of the matter but also inform policymaking about ILP.

Conclusion

In pluralistic healthcare systems, such as Pakistan's where a large proportion of healthcare is delivered through the for-profit private healthcare sector, ILP may lead physicians to prescribe expensive and/or unnecessary medications. In a context where inflation, low levels of income, and out-of-pocket healthcare expenses conflate,

added medication-related costs due to ILP may exacerbate patients' financial difficulties. This may not only discourage patients from adhering to medical treatment but also contribute to their mental distress arising from poverty and the inability to afford healthcare costs. In Pakistan, the field of medicine is linked to nobility, and if ILP continues to happen, the nobility aspect may gradually fade away. It is the prime responsibility of physicians to adhere to the principles of patient-centred care, as understanding the harms linked to ILP and patients' plights can help physicians make informed medical/clinical decisions, which can further sustain physicians' reputations in society.

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