Exploring Conflicts of Interest with Pharmaceutical Industry Among Oncologists

The health-care system in low- and middle-income countries (LMICs) is emerging as an attractive new market for pharmaceutical industry (Fadlallah et al. 2018), particularly in oncology. Historically, pharmaceutical companies have tried to influence clinical practice and reimbursement policy in the field of oncology through various strategies such as advertisements, and payments to various stakeholders including as sample drugs, gifts, paid speaking engagements, advisory boards, and trips to conferences. While the prevalence and impact of these practices are well-documented in high-income countries, there is a paucity of data from low-income and middle-income countries, especially in Africa (Rubagumya et al. Lancet Oncol, 2023). The current strategic shift of pharmaceutical industry to focus on other markets outside the US and Europe has raised new concerns on the industry-doctor relationships - an increasingly common phenomenon in these regions, where educational, research, and clinical programs often depend on industry support due to limited resources and scarce commitment of health authorities toward cancer. However, the dynamics and implications of these relationships in the context of LMICs remain largely unexplored. Therefore, understanding these industry-oncologist interactions is crucial for assessing potential risks and benefits and ensuring ethical practices.

The primary objective of this cross-sectional survey study is to:

1-Assess the nature, extent, and impact of interactions between the pharmaceutical industry and oncologists in low- and middle-income countries compared to high-income countries.

2-Generate context-specific data to inform policy and practice and facilitate discussions about the ethical dimensions of these relationships.

The study protocol was approved by an ethics committee before data collection. Respondents' information will be collected anonymously and stored with complete respect of personal data protection and privacy.

* Required

Consent to participate

1. **By selecting "Yes", I agree to participate in this study and I give my consent to use my data for research purposes only.** *

   ◯ Yes

Part I: Participants' demographics

2. **Gender** *

- ◯ Woman
- ◯ Man
- ◯ Non-binary/other
- ◯ Prefer not to disclose

3. **Age** *

4. **Current country of practice** *

5. **Specialty** *

- ◯ Medical Oncology
- ◯ Radiation Oncology
- ◯ Clinical Oncology
- ◯ Haemato-Oncology
- ◯ Pediatric Oncology
- ◯ Surgical Oncology
- ◯ Oncology Pharmacy
- ◯ Other

6. **Scientific degree (please note: all medical doctors are qualified as MD)** *

- ◯ MD
- ◯ PhD
- ◯ MD/PhD or MD/MSc
- ◯ PharmD
- ◯ PharmD/PhD
- ◯ Other

7. **Current Position** *

- ◯ Resident Physician / Physician in Training
- ◯ Specialist Doctor / Attending Physician
- ◯ Professor (Assistant, Associate, Full)
- ◯ Other

8. **Years of experience (starting from residency or other training programs)** *

9. **Primary Institution** *

- ◯ Public sector
- ◯ Private sector
- ◯ Public and private sector
- ◯ Other

10. **During your residency training or after graduation, which entity or method ensures mainly your continuous medical education** (more than one answer can apply)**?** *

- [ ] National board of medicine
- [ ] Academia or hospital
- [ ] Pharmaceutical companies through their representatives
- [ ] International cancer society's guidelines and educational material
- [ ] Medical websites such as UptoDate, OncoAlert, MedScape, etc
- [ ] Key Oncologists on social media
- [ ] Oncology Conferences
- [ ] Scientific journals and/or books
- [ ] Other

11. **Are you an active member of national authorities or cancer societies that build or update practice guidelines in oncology?** *

- ◯ Yes
- ◯ No
- ◯ I prefer not to answer

12. **How confident do you feel about being well-trained to practice evidence-based medicine in your daily practice and clinical decision-making of oncology treatments?** *

- ◯ Very confident
- ◯ Confident
- ◯ Somehow confident
- ◯ I have issues in practicing evidence-based medicine in my setting

Part 2: Interactions with pharmaceutical industry

13. **According to you, what is (are) the case(s) from the list below considered as a conflict of interest with pharmaceutical industry and need(s) to be disclosed?** *

- [ ] Sample drugs
- [ ] Gifts from pharma representatives
- [ ] Trips to conferences or free accommodation
- [ ] Travel grants from companies
- [ ] Personal Research funding
- [ ] Institutional Research funding
- [ ] Direct payments (honoraria, etc)
- [ ] Consulting or advisory roles
- [ ] Expert testimony
- [ ] Food and beverage paid by pharmaceutical industry
- [ ] All of the above
- [ ] None of the above

14. **How many times do representatives of the pharmaceutical industry visit your cancer care facility?** *

- ◯ Daily
- ◯ Weekly
- ◯ Monthly
- ◯ Occasionally
- ◯ Rarely
- ◯ Never

15. **What types of support have you received from the pharmaceutical industry in the last 5 years?** *

- [ ] I prefer not to declare
- [ ] I have not received any support
- [ ] Sample drugs
- [ ] Gifts
- [ ] Trips to conferences
- [ ] Other

16. **During the last 5 years, what was the amount of the honorarium (direct payment) you received from the pharmaceutical industry (as cash) ?** *

- ◯ I prefer not to declare
- ◯ I have not received any amount of money
- ◯ <500 US dollars
- ◯ 500-1000 US dollars
- ◯ 1000-2000 US dollars
- ◯ 2000-5000 US dollars
- ◯ >5000 US dollars
- ◯ Other

17. **What is your approach to disclosing any conflicts of interest ?** *

- [ ] I don't report my conflicts of interest
- [ ] I report them before starting my presentations
- [ ] I acknowledge them when publishing my research
- [ ] I prefer not to answer
- [ ] Other

18. **Do you feel pressure from pharmaceutical industry to support the prescriptions of their drugs when having conflicts of interest with them?** *

- ◯ Yes
- ◯ No
- ◯ Not sure

19. **Does being a speaker in an industry sponsored event influence your prescriptions and treatment recommendations during multidisciplinary team meetings?** *

- ◯ Yes
- ◯ No
- ◯ Not sure

20. **When accepting to have a conflict of interest with a pharmaceutical industry, do you still appraise their clinical trials objectively?** *

- ◯ Yes
- ◯ No
- ◯ Not sure

21. **Have you ever declined or remodulated to use a recommendation from an international oncology society due to your conflicts of interest with industry?** *

- ◯ Yes
- ◯ No
- ◯ Not sure

22. **Would you accept to get involved with pharmaceutical industry regarding a new drug when the evidence from their related clinical trials is weak or clinically irrelevant?** *

- ◯ No
- ◯ Yes
- ◯ Not sure

Part 3: Measures to improve reporting oncologists-industry interactions

23. **According to you, who should pay for continuous medical training?** *

- [ ] Yourself (personal resources)
- [ ] Your institution
- [ ] Pharmaceutical industry
- [ ] International oncology organizations
- [ ] Local cancer societies
- [ ] All of the above
- [ ] Other

24. **Are there any local regulations or policies in your home country to manage conflicts of interest of health care professionals with the pharmaceutical industry?** *

- ◯ Yes
- ◯ No
- ◯ I don't know

25. **According to you, what should be done to improve conflicts of interest (COI) reporting in oncology?** *

- [ ] Open conflict of interest databases to enhance transparency
- [ ] Patient and public involvement in the management of COI
- [ ] Regular training and education on how to handle COI
- [ ] Clear policy and local regulations
- [ ] Other

26. **According to you, what are the reasons for not reporting conflicts of interest by oncologists?** *

- [ ] Lack of awareness
- [ ] Complex relationships with pharmaceutical industry
- [ ] Fear of losing financial incentives
- [ ] Fear of negative impact on credibility or reputation
- [ ] Lack of policy in home countries of practice
- [ ] Minimizing impact of conflicts in oncology in practice
- [ ] Other

27. **Do you think that income of oncologists is an important factor of having these relationships with pharmaceutical industry?** *

- ◯ Strongly agree
- ◯ Agree
- ◯ Neutral
- ◯ Disagree
- ◯ Strongly disagree

28. Do you agree with these statements? *

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
A third-party or intermediary entity (such as an oncology society) could collect donations from various pharmaceutical companies and allocate the funds towards supporting research and educational activities, rather than directly providing them to individual oncologists.	◯	◯	◯	◯	◯
Countries should build programs to publicly report payments to doctors from the pharmaceutical industry.	◯	◯	◯	◯	◯
Oncology societies and academic institutions should develop and use clear conflict of interest declaration policies for all speakers of their events.	◯	◯	◯	◯	◯
Medical schools should incorporate programs to increase awareness of potential conflicts of interest with the pharmaceutical industry.	◯	◯	◯	◯	◯
Cancer societies should independently select scientific committees, content during their meetings and speakers should be forbidden from promoting any specific cancer medicine.	◯	◯	◯	◯	◯
Research on industry-oncologist relationships should be supported and promoted by hospitals and academic institutions.	◯	◯	◯	◯	◯
Encouraging multiple					

pharmaceutical companies to collaborate on supporting various access initiatives could mitigate bias favoring a specific product and potentially establish a sustainable framework for these activities.	◯	◯	◯	◯	◯
Restricting physician–industry interactions could be one potentially effective option to consider, particularly in light of the evidence that restriction policies may improve prescribing behaviors.	◯	◯	◯	◯	◯
Complete transparency in reporting conflicts of interest is necessary for patients and their advocates.	◯	◯	◯	◯	◯