

## Medications that Cause Cardiac Adverse Reaction in Iraqi Patients: a Qualitative Study

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**SUMMARY.** The cardio-vascular disease, the major cause of morbidity and mortality, is a serious and expanding issue. Cardiotoxicity is a frequent adverse pharmacological reaction and the anthracycline class of anticancer medications, in particular, cause significant cardiotoxicity. Oxidative stress, free radical production, and hypoxia are common mechanisms causing cardiotoxicity. The study has the core component was qualitative (interviews) and the supplemental component was quantitative (adverse drug reaction, ADR, reports). This qualitative component included semi-structured (mostly face to face) interviews involving hospital physician from different hospitals with experience with medicines that cause cardiac adverse drug reactions. The interviews were conducted from Jan12, 2022, and Jun 29, 2022. Thematic analyses were used to analyze qualitative data generated from the interviews. The study sample included 20 physicians from three governmental hospitals in Baghdad, Iraq. The physicians were 7 women and 13 men. Both physician interviews and the Iraqi Pharmacovigilance Center (IqPhvC) data showed the drugs that cause cardiac ADRs.

**RESUMEN.** La enfermedad cardiovascular, principal causa de morbilidad y mortalidad, es un problema grave y en expansión. La cardiotoxicidad es una reacción farmacológica adversa frecuente y la clase de antraciclinas de los medicamentos contra el cáncer, en particular, causa una cardiotoxicidad significativa. El estrés oxidativo, la producción de radicales libres y la hipoxia son mecanismos comunes que causan cardiotoxicidad. El estudio tiene un componente central cualitativo (entrevistas) y un componente complementario cuantitativo (reacción adversa a medicamentos, RAM, informes). Este componente cualitativo incluyó entrevistas semiestructuradas (principalmente cara a cara) con médicos de hospitales de diferentes hospitales con experiencia en medicamentos que causan reacciones adversas cardíacas. Las entrevistas se realizaron entre el 12 de enero de 2022 y el 29 de junio de 2022. Se utilizaron análisis temáticos para analizar los datos cualitativos generados a partir de las entrevistas. La muestra del estudio incluyó a 20 médicos de tres hospitales gubernamentales en Bagdad, Irak. Los médicos fueron 7 mujeres y 13 hombres. Tanto las entrevistas con los médicos como los datos del Centro de Farmacovigilancia Iraquí (IqPhvC) mostraron los medicamentos que causan reacciones adversas cardíacas.

**KEY WORDS:** cardiovascular diseases, Hospital pharmacists, morbidity, qualitative study.

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