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## Drug-drug interaction-related uncontrolled glycemia (Article)

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### Abstract

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Context: The literature of drug-drug interaction (DDI)-related uncontrolled causality, and preventability of DDI-induced UCG (HbA1c >7%) in outpatients glycemia (UCG) among outpatients with Type 2 diabetes mellitus is still limited. Aims: The aim of this study is to identify the prevalence, mechanism, severity, with Type 2 diabetes. Settings and Design: A cross-sectional study was conducted in Penang General Hospital. Methods: A computerized system for DDI checking was used to assess the severity and mechanism of DDIs. Drug interaction probability scale was used to evaluate the likelihood of DDIs. Preventability of DDIs has been determined by the instrument of Hallas. The UCG prevalence related to DDIs was further assessed. Statistical Analysis Used: SPSS 21.00 was used in this study. Results: From 425 outpatients with HbA1c% test, their mean age was 58.7 ± 12.8 years. Only 225 (52.9%) cases had controlled glycemia while 200 (47.1%) cases with UCG. They had multiple comorbidities, with a mean number of 3.8 ± 2.2/patient and often prescribed with multiple medications, with a mean number of 6.33 ± 4.67/patient. It has been detected that 86 DDIs causing UCG in 46 patients (23%) with range of (1-4) DDIs per patient. Drugs with DDI-induced UCG were as follows: diuretics (79%), salbutamol (9.2%), cortisones (5.8%), and others (6%). The majority of these DDIs were categorized as possible (77.9%) and preventable (37%). Conclusion: Nearly one-quarter of UCG was induced by DDIs; most of these DDIs are possible, and more than one-third are preventable. It was concluded that thiazide diuretics have the highest prevalence of DDI-related UCG. © 2018 Journal of Pharmacy and Bioallied Sciences | Published by Wolters Kluwer - Medknow.

### Author keywords

Diabetes mellitus drug interaction probability scale HbA1c hyperglycemia

### Indexed keywords

EMTREE drug terms: acarbose chlorothiazide cortisone furosemide glibenclamide gliclazide  
hemoglobin A1c hydrochlorothiazide insulin levothyroxine metformin phenytoin  
risperidone salbutamol spironolactone thiazide diuretic agent

### EMTREE medical terms:

adult area under the curve Article blood glucose monitoring causality Chinese  
comorbidity computerized provider order entry demography disease severity  
drug bioavailability drug interaction probability scale female human hypoglycemia  
Indian lifestyle modification major clinical study Malay (people) male  
non insulin dependent diabetes mellitus observational study outpatient prevalence  
priority journal probability prospective study rating scale

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(2005) *Diabetes Spectrum*

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(2015) *Indian Journal of  
Pharmacology*Reply: Time-lapse parameters  
could not predict pregnancy: A  
hasty conclusion?Kirkegaard, K. , Kesmodel, U.S. ,  
Hindkjær, J.J.  
(2014) *Human Reproduction*[View all related documents based  
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acarbose, 56180-94-0; chlorothiazide, 58-94-6, 7085-44-1; cortisone, 53-06-5; furosemide, 54-31-9; glibenclamide, 10238-21-8; gliclazide, 21187-98-4; hemoglobin A1c, 62572-11-6; hydrochlorothiazide, 58-93-5; insulin, 9004-10-8; levothyroxine, 51-48-9; metformin, 1115-70-4, 657-24-9; phenytoin, 57-41-0, 630-93-3; risperidone, 106266-06-2; salbutamol, 18559-94-9, 35763-26-9; spironolactone, 52-01-7

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Publisher: Medknow Publications

References (49)

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- 
- 1 Nathan, D.M., Davidson, M.B., DeFronzo, R.A., Heine, R.J., Henry, R.R., Pratley, R., Zinman, B., (...), Kahn, R.  
**Impaired fasting glucose and impaired glucose tolerance: Implications for care**  
  
(2007) *Diabetes Care*, 30 (3), pp. 753-759. Cited 706 times.  
<http://care.diabetesjournals.org/cgi/reprint/30/3/753.pdf>  
doi: 10.2337/dc07-9920  
  
[View at Publisher](#)
- 
- 2 Rehman, A., Setter, S.M., Vue, M.H.  
**Drug-induced glucose alterations part 2: Drug-induced hyperglycemia**  
  
(2011) *Diabetes Spectrum*, 24 (4), pp. 234-238. Cited 13 times.  
<http://spectrum.diabetesjournals.org/content/24/4/234.full.pdf+html>  
doi: 10.2337/diaspect.24.4.234  
  
[View at Publisher](#)
- 
- 3 Hasnain, H., Ali, H., Zafar, F., Akbar, A.S., Hameed, K., Shareef, H.  
**Drug-drug interaction; Facts and comparisons with national and international bench marks; A threat more than a challenge for patient safety in clinical and economic scenario**  
(2017) *Prof Med J*, 24, pp. 357-365.
- 
- 4 Martins, I.J.  
**Drug-drug interactions with relevance to drug induced mitochondrial toxicity and accelerated global chronic diseases**  
(2017) *ECPT*, 3, pp. 18-21.
- 
- 5 Clement, S., Braithwaite, S.S., Magee, M.F., Ahmann, A., Smith, E.P., Schafer, R.G., Hirsh, I.B.  
**Management of Diabetes and Hyperglycemia in Hospitals**  
  
(2004) *Diabetes Care*, 27 (2), pp. 553-591. Cited 805 times.  
doi: 10.2337/diacare.27.2.553  
  
[View at Publisher](#)
- 
- 6 Tatro, D.S.  
(2003) *Drug Interaction Facts 2004*. Cited 2 times.  
1st ed. New York; Facts & Comparisons
- 
- 7 Cade, W.T.  
**Diabetes-related microvascular and macrovascular diseases in the physical therapy setting**  
  
(2008) *Physical Therapy*, 88 (11), pp. 1322-1335. Cited 225 times.  
doi: 10.2522/ptj.20080008  
  
[View at Publisher](#)
-

- 8 Hammad, M.A., Mohamed Noor, D.A., Syed Sulaiman, S.A., Aziz, N.A., Elsobky, Y.  
A prospective study of prevalence of uncontrolled glycaemia in type 2 diabetes mellitus outpatients, 2016 ACCP Virtual Poster Symposium (2016) *Pharmacotherapy*, 36, pp. e83-138.
- 
- 9 *Guide to HbA1c, the Global Diabetes Community*  
Online Resources. [Last updated on 2017 Jan 01; Last accessed on 2017 Jan 28]  
<http://www.diabetes.co.uk/what-is-hba1c.html>
- 
- 10 Bykov, K., Gagne, J.J.  
**Generating Evidence of Clinical Outcomes of Drug–Drug Interactions**  
  
(2017) *Drug Safety*, 40 (2), pp. 101-103. Cited 2 times.  
<http://rd.springer.com/journal/40264>  
doi: 10.1007/s40264-016-0496-8  
  
View at Publisher
- 
- 11 Hammad, M.A., Tangiisuran, B., El Aziz, N.A., Hassan, Y.  
A prospective study of uncontrolled glycaemia secondary to drug-drug interactions in type 2 diabetes mellitus patients at Penang General Hospital in Malaysia  
(2013) *Pharmacotherapy*, 33, pp. e50-80.
- 
- 12 Dechanont, S., Maphanta, S., Butthum, B., Kongkaew, C.  
**Hospital admissions/visits associated with drug-drug interactions: A systematic review and meta-analysis**  
  
(2014) *Pharmacoepidemiology and Drug Safety*, 23 (5), pp. 489-497. Cited 38 times.  
[www.interscience.wiley.com/jpages/1053-8569](http://www.interscience.wiley.com/jpages/1053-8569)  
doi: 10.1002/pds.3592  
  
View at Publisher
- 
- 13 Standards of medical care in diabetes-2016  
(2016) *Diabetes Care*, 39, pp. S39-46. Cited 140 times.  
American Diabetes Association
- 
- 14 Tatro, D.  
(2010) *Drug Interaction Facts: The Authority on Drug Interactions*. Cited 38 times.  
St. Louis, Mo: Wolters Kluwer Health Facts & Comparisons
- 
- 15 Qorraj-Bytyqi, H., Hoxha, R., Krasniqi, S., Bahtiri, E., Krasniqi, V.  
**The incidence and clinical relevance of drug interactions in pediatrics**  
  
(2012) *Journal of Pharmacology and Pharmacotherapeutics*, 3 (4), pp. 304-307. Cited 5 times.  
doi: 10.4103/0976-500X.103686  
  
View at Publisher
- 
- 16 *Lexicomp, Lexi-Interact™*  
[Last updated on 2016 Jul 22; Last accessed on 2016 Oct 15]  
<http://www.uptodate.com/crslsq/interact/frameset.jsp>
- 
- 17 *Online Resources*. Cited 4 times.  
Drug Interactions Checker, Drugs. com. [Last updated on 2016 Sep 1; Last accessed on 2016 Oct 15]  
[https://www.drugs.com/drug\\_interactions.php](https://www.drugs.com/drug_interactions.php)
-

- 18 *Drug Interactions Checker, Medscape Online Resources*  
[Last updated on 2016 Sep 15; Last accessed on 2016 Oct 15]  
<http://www.reference.medscape.com/drug-interactionchecker>
- 
- 19 Horn, J.R., Hansten, P.D., Chan, L.-N.  
**Proposal for a new tool to evaluate drug interaction cases**  
(2007) *Annals of Pharmacotherapy*, 41 (4), pp. 674-680. Cited 332 times.  
doi: 10.1345/aph.1H423  
[View at Publisher](#)
- 
- 20 Naranjo, C.A., Busto, U., Sellers, E.M., Sandor, P., Ruiz, I., Roberts, E.A., Janacek, E., (...), Greenblatt, D.J.  
**A method for estimating the probability of adverse drug reactions**  
(1981) *Clinical Pharmacology and Therapeutics*, 30 (2), pp. 239-245. Cited 5707 times.  
doi: 10.1038/clpt.1981.154  
[View at Publisher](#)
- 
- 21 HALLAS, J., HARVALD, B., GRAM, L.F., GRODUM, E., BRØSEN, K., HAGHFELT, T., DAMSBO, N.  
**Drug related hospital admissions: the role of definitions and intensity of data collection, and the possibility of prevention**  
(1990) *Journal of Internal Medicine*, 228 (2), pp. 83-90. Cited 198 times.  
doi: 10.1111/j.1365-2796.1990.tb00199.x  
[View at Publisher](#)
- 
- 22 Saheb Sharif-Askari, N., Syed Sulaiman, S.A., Saheb Sharif-Askari, F., Hussain, A.A.S.  
**Adverse drug reaction-related hospitalisations among patients with heart failure at two hospitals in the United Arab Emirates**  
(2014) *International Journal of Clinical Pharmacy*, 37 (1), pp. 105-112. Cited 3 times.  
<http://springerlink.metapress.com/content/2210-7703/>  
doi: 10.1007/s11096-014-0046-3  
[View at Publisher](#)
- 
- 23 Steyerberg, E.W., Eijkemans, M.J.C., Harrell Jr., F.E., Habbema, J.D.F.  
**Prognostic modelling with logistic regression analysis: A comparison of selection and estimation methods in small data sets**  
(2000) *Statistics in Medicine*, 19 (8), pp. 1059-1079. Cited 393 times.  
doi: 10.1002/(SICI)1097-0258(20000430)19:8<1059::AID-SIM412>3.0.CO;2-0  
[View at Publisher](#)
- 
- 24 Vittinghoff, E., McCulloch, C.E.  
**Relaxing the rule of ten events per variable in logistic and cox regression**  
(2007) *American Journal of Epidemiology*, 165 (6), pp. 710-718. Cited 942 times.  
doi: 10.1093/aje/kwk052  
[View at Publisher](#)
- 
- 25 *National Institute of Health NIH Guideline*  
National Medical Research Register Online Resources. [Last updated on 2016 Jun 29; Last accessed on 2016 Oct 28]  
<https://www.nmrr.gov.my/fwblLoginPage.jsp>
-

- 26 Charlson, M.E., Pompei, P., Ales, K.L., MacKenzie, C.R.  
A new method of classifying prognostic comorbidity in longitudinal studies: Development and validation  
(1987) *Journal of Chronic Diseases*, 40 (5), pp. 373-383. Cited 19443 times.  
doi: 10.1016/0021-9681(87)90171-8  
[View at Publisher](#)
- 
- 27 Scheen, A.J., Lefèbvre, P.J.  
Antihyperglycaemic Agents: Drug Interactions of Clinical Importance  
(1995) *Drug Safety*, 12 (1), pp. 32-45. Cited 47 times.  
doi: 10.2165/00002018-199512010-00003  
[View at Publisher](#)
- 
- 28 Scheen, A.J.  
Drug interactions of clinical importance with antihyperglycaemic agents: An update  
(2005) *Drug Safety*, 28 (7), pp. 601-631. Cited 99 times.  
[http://saturn.bids.ac.uk/cgi-bin/ds\\_deliver/1/u/d/ISIS/19807947.1/adis/dsf/2005/00000028/00000007/art00004/AB33B0A68C5EC09F1121166004D89175D67EB4EF8B.pdf?link=http://www.ingentaconnect.com/error/delivery&format=pdf](http://saturn.bids.ac.uk/cgi-bin/ds_deliver/1/u/d/ISIS/19807947.1/adis/dsf/2005/00000028/00000007/art00004/AB33B0A68C5EC09F1121166004D89175D67EB4EF8B.pdf?link=http://www.ingentaconnect.com/error/delivery&format=pdf)  
doi: 10.2165/00002018-200528070-00004  
[View at Publisher](#)
- 
- 29 Drzewoski, J., Kopff, B.  
Clinically important effects of oral antidiabetic drug interactions  
(2000) *Polski merkuriusz lekarski : organ Polskiego Towarzystwa Lekarskiego*, 9 (51), pp. 605-607.
- 
- 30 Hansten, P.D., Horn, J.R.  
(2004) *The Top 100 Drug Interactions: A Guide to Patient Management*, pp. 157-169. Cited 72 times.  
Edmonds, WA: H & H Publications
- 
- 31 McDonnell, P.J., Jacobs, M.R., Monsanto, H.A., Kaiser, J.-M.  
Hospital admissions resulting from preventable adverse drug reactions  
(2002) *Annals of Pharmacotherapy*, 36 (9), pp. 1331-1336. Cited 338 times.  
<http://aop.sagepub.com/content/by/year>  
doi: 10.1345/aph.1A333  
[View at Publisher](#)
- 
- 32 Hanlon, J.T., Perera, S., Newman, A.B., Thorpe, J.M., Donohue, J.M., Simonsick, E.M., Shorr, R.I., (...), Marcum, Z.A.  
Potential drug–drug and drug–disease interactions in well-functioning community-dwelling older adults  
(2017) *Journal of Clinical Pharmacy and Therapeutics*, 42 (2), pp. 228-233. Cited 2 times.  
[http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1365-2710](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1365-2710)  
doi: 10.1111/jcpt.12502  
[View at Publisher](#)
- 
- 33 Strandell, J., Wahlin, S.  
Pharmacodynamic and pharmacokinetic drug interactions reported to Vigibase, the WHO global individual case safety report database  
(2011) *European Journal of Clinical Pharmacology*, 67 (6), pp. 633-641. Cited 21 times.  
doi: 10.1007/s00228-010-0979-y  
[View at Publisher](#)
-

- 34 Strandell, J., Bate, A., Lindquist, M., Edwards, I.R.  
Drug-drug interactions - A preventable patient safety issue? [1]  
(2008) *British Journal of Clinical Pharmacology*, 65 (1), pp. 144-146. Cited 25 times.  
doi: 10.1111/j.1365-2125.2007.02981.x  
View at Publisher
- 
- 35 Hakkarainen, K.M., Hedna, K., Petzold, M., Hägg, S.  
Percentage of patients with preventable adverse drug reactions and preventability of adverse drug reactions - a meta-analysis  
(2012) *PLoS ONE*, 7 (3), art. no. e33236. Cited 101 times.  
<http://www.plosone.org/article/fetchObjectAttachment.action?uri=info%3Adoi%2F10.1371%2Fjournal.pone.0033236&representation=PDF>  
doi: 10.1371/journal.pone.0033236  
View at Publisher
- 
- 36 Sánchez-Fidalgo, S., Guzmán-Ramos, M.I., Galván-Banqueri, M., Bernabeu-Wittel, M., Santos-Ramos, B.  
Prevalence of drug interactions in elderly patients with multimorbidity in primary care  
(2017) *International Journal of Clinical Pharmacy*, 39 (2), pp. 343-353. Cited 3 times.  
<http://springerlink.metapress.com/content/2210-7703/>  
doi: 10.1007/s11096-017-0439-1  
View at Publisher
- 
- 37 Qureshi, A., Ghoto, M., Dayo, A., Arain, M., Parveen, R., Mangi, A.  
Drug-drug interactions (DDIs); Prevalence of various levels in prescriptions at public sector teaching hospital of Hyderabad, Pakistan  
(2017) *Prof Med J*, 24, pp. 239-243.
- 
- 38 *Diuretics and Hypoglycemic Agents Drug Interactions, Drug Interactions Checker*  
Online Resources. [Last updated on 2016 Sep 15; Last accessed on 2016 Oct 30]  
[http://www.drugs.com/interactions-check.php-drug\\_list=9-0,594-0,1146-0,1179-0,1257-0,1340-0,1573-0](http://www.drugs.com/interactions-check.php-drug_list=9-0,594-0,1146-0,1179-0,1257-0,1340-0,1573-0)
- 
- 39 Merel, S.E., Paauw, D.S.  
Common Drug Side Effects and Drug-Drug Interactions in Elderly Adults in Primary Care  
(2017) *Journal of the American Geriatrics Society*, 65 (7), pp. 1578-1585. Cited 2 times.  
<http://www.blackwellpublishing.com/journal.asp?ref=0002-8614&site=1>  
doi: 10.1111/jgs.14870  
View at Publisher
- 
- 40 Jones, G.C., Macklin, J.P., Alexander, W.D.  
Contraindications to the use of metformin  
(2003) *British Medical Journal*, 326 (7379), pp. 4-5. Cited 95 times.  
View at Publisher
- 
- 41 Eurich, D.T., McAlister, F.A., Blackburn, D.F., Majumdar, S.R., Tsuyuki, R.T., Varney, J., Johnson, J.A.  
Benefits and harms of antidiabetic agents in patients with diabetes and heart failure: Systematic review  
(2007) *British Medical Journal*, 335 (7618), pp. 497-501. Cited 259 times.  
doi: 10.1136/bmj.39314.620174.80  
View at Publisher
- 
- 42 Hammad, M.A., Khamis, A.A., Al-Akhali, K.M., Elsayed, T., Alasmri, A.M., Al-Ahmari, E.M.  
Evaluation of drug dosing in renal failure  
(2016) *IOSR J Pharm Biol Sci*, 11, pp. 39-50.

- 43 Jain, S., Jain, P., Sharma, K., Saraswat, P.  
A prospective analysis of drug interactions in patients of intensive cardiac care unit

(2017) *Journal of Clinical and Diagnostic Research*, 11 (3), pp. FC01-FC04.  
[http://www.jcdr.net/articles/PDF/9403/23638\\_CE\[Ra\]\\_F\(DK\)\\_PF1\(PGH\)\\_PFA\(DK\)\\_PF2\(NE\\_SY\\_DK\).pdf](http://www.jcdr.net/articles/PDF/9403/23638_CE[Ra]_F(DK)_PF1(PGH)_PFA(DK)_PF2(NE_SY_DK).pdf)  
doi: 10.7860/JCDR/2017/23638.9403

[View at Publisher](#)

- 44 *Cortisones, Salbutamol and Hypoglycemic Agents Drug Interactions, Drug Interactions Checker*  
Online Resources. [Last updated on 2016 Sep 15; Last accessed on 2016 Oct 30]  
[http://www.drugs.com/interactions-check.php-drug\\_list=9-0,748-0,1179-0,1340-0,1573-0,109-2463](http://www.drugs.com/interactions-check.php-drug_list=9-0,748-0,1179-0,1340-0,1573-0,109-2463)

- 45 *Phenytoin and Hypoglycemic Agents Drug Interactions, Drug Interactions Checker*  
Online Resources. [Last updated on 2016 Sep 15; Last accessed on 2016 Nov 09]  
[http://www.drugs.com/interactions-check.php-drug\\_list=9-0,1179-0,1340-0,1573-0,1863-0,2019-0](http://www.drugs.com/interactions-check.php-drug_list=9-0,1179-0,1340-0,1573-0,1863-0,2019-0)

- 46 *Acarbose and Metformin Drug Interaction, Drug Interactions Checker*  
Online Resources. [Last updated on 2016 Sep 15; Last accessed on 2016 Nov 09]  
[http://www.drugs.com/interactions-check.php-drug\\_list=9-0,1179-0,1340-0,1573-0](http://www.drugs.com/interactions-check.php-drug_list=9-0,1179-0,1340-0,1573-0)


- 47 *Drug Interactions Checker*. Cited 9 times.  
Online Resources. [Last updated on 2016 Sep 15; Last accessed on 2016 Nov 09]  
<http://www.drugs.com/interactions-check.php>

- 48 *Online Resources*. Cited 4 times.  
Drug Interaction Checker, drug. com. [Last updated on 2016 Sep 15; Last accessed on 2016 Nov 09]  
[https://www.drugs.com/interactions-check.php-drug\\_list=243-0,276-0,1340-0,1401-0,1573-0,1615-0,1830-0,1991-0&types\[\]=major&types\[\]=minor&types\[\]=moderate&types\[\]=food&types\[\]=therapeutic\\_duplication&professional=1](https://www.drugs.com/interactions-check.php-drug_list=243-0,276-0,1340-0,1401-0,1573-0,1615-0,1830-0,1991-0&types[]=major&types[]=minor&types[]=moderate&types[]=food&types[]=therapeutic_duplication&professional=1)

- 49 Romagnoli, K.M., Nelson, S.D., Hines, L., Empey, P., Boyce, R.D., Hochheiser, H.  
Information needs for making clinical recommendations about potential drug-drug interactions: a synthesis of literature review and interviews

(2017) *BMC Medical Informatics and Decision Making*, 17 (1), art. no. 21.  
<http://www.biomedcentral.com/bmcmedinformdecismak/>  
doi: 10.1186/s12911-017-0419-3

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