

Supplementary

Table S1. Characteristics of newspaper covered in the analysis.

Geographical circulation of the newspaper	Name of the newspaper	Frequency	Publisher
1.National Newspapers	Citizen City Press Mail & Guardian The New Age The Star The Sunday Independent The Times Sunday Times Sunday Tribune Sowetan	Monday-Friday Sunday Weekly Daily Monday-Saturday Saturday Weekly Weekly Weekly Weekly Daily	Caxton & CTP Media24 M & G Media Ltd. Johannesburg TNA Media Independent Newspapers Johannesburg Independent Newspapers Johannesburg Avusa Media Ltd. Johannesburg Avusa Media Ltd. Johannesburg Independent Newspapers Johannesburg Avusa Media Ltd. Johannesburg
2.Provincial Newspapers			
Eastern Cape	Daily Dispatch The Herald Weekend Post	Monday-Saturday Monday-Friday Weekly	Avusa Media Ltd. Johannesburg Avusa Media Ltd. Johannesburg Avusa Media Ltd. Johannesburg
Gauteng	Pretoria New	Monday-Saturday	Independent Newspapers Johannesburg
KwaZulu-Natal	Business Day Daily news Independent on Saturday Witness	Daily Daily Saturday Daily	BDFM- Avusa Media Ltd. Johannesburg Independent Newspapers Johannesburg Independent Newspapers Johannesburg Media24
Western Cape	Cape Argus Cape Times	Monday-Sunday Daily	Independent Newspapers Johannesburg Independent Newspapers Johannesburg

Table S2. Table showing databases used in the study.

Date of Search	Database	Years Searched	Search Terms	Results
21/09/2015	Pubmed	1990 - 2015	Title/Abstract; Full Text; [healthcare waste]	83 results
22/09/2015	Pubmed	1990 - 2015	Title/Abstract; Full Text; [medical waste]	278 results
22/09/2015	Pubmed	1990 - 2015	Title/Abstract; Full Text; [biomedical waste]	64 results
22/09/2015	Pubmed	1990 - 2015	Title/Abstract; Full Text; [clinical waste]	66 results
23/09/2015	Pubmed	1990 - 2015	Title/Abstract; Full Text; [hospital waste]	127 results
25/09/2015	EbscoHost	1990 - 2015	Title; Full Text; [healthcare waste]	13 results
25/09/2015	EbscoHost	1990 - 2015	Title; Full Text; [medical waste]	88 results
25/09/2015	EbscoHost	1990 - 2015	Title; Full Text; [biomedical waste]	36 results
25/09/2015	EbscoHost	1990 - 2015	Title; Full Text; [clinical waste]	18 results
25/09/2015	EbscoHost	1990 - 2015	Title; Full Text; [hospital waste]	59 results
28/09/2015	Google Scholar	1990 - 2015	Title; Exact Phrase; [healthcare waste]	276 results
28/09/2015	Google Scholar	1990 - 2015	Title; Exact Phrase; without citations; [medical waste]	1070 results
28/09/2015	Google Scholar	1990 - 2015	Title; Exact Phrase; without citations; [biomedical waste]	268 results
28/09/2015	Google Scholar	1990 - 2015	Title; Exact Phrase; without citations; [clinical waste]	267 results
28/09/2015	Google Scholar	1990 - 2015	Title; Exact Phrase; [hospital waste]	803 results
05/10/2015	Proquest	1990 - 2015	Document Title; Exact Phrase; [healthcare waste]	202 results
05/10/2015	Proquest	1990 - 2015	Document Title; Exact Phrase; [medical waste]	3074 results
05/10/2015	Proquest	1990 - 2015	Document Title; Exact Phrase; [biomedical waste]	264 results
05/10/2015	Proquest	1990 - 2015	Document Title; Exact Phrase; [clinical waste]	161 results
05/10/2015	Proquest	1990 - 2015	Document Title; Exact Phrase; [hospital waste]	998 results
10/10/2015	Web of Science	1990 - 2015	Title; [healthcare waste]	133 results
10/10/2015	Web of Science	1990 - 2015	Title; [medical waste]	776 results
10/10/2015	Web of Science	1990 - 2015	Title; [biomedical waste]	94 results
10/10/2015	Web of Science	1990 - 2015	Title; [clinical waste]	27 results
10/10/2015	Web of Science	1990 - 2015	Title; [hospital waste]	465 results
19/10/2015	OATD	1990 – 2015	Title; Exact Phrase; any country; [healthcare waste]	3 results
19/10/2015	OATD	1990 - 2015	Title; Exact Phrase; any country; [medical waste]	10 results
19/10/2015	OATD	1990 - 2015	Title; Exact Phrase; any country; [biomedical waste]	3 results
19/10/2015	OATD	1990 – 2015	Title; Exact Phrase; any country; [clinical waste]	3 results
19/10/2015	OATD	1990 - 2015	Title; Exact Phrase; any country; [hospital waste]	6 results

Table S3. A list of all references used for the scoping review.

- 1) Abdullah, M.A., Zahid, A., Sattar, N.Y. & Ahmed, Y. (2013). Awareness about biomedical waste related risks among sanitary staff of public and private hospitals in Rawalpindi - Pakistan. *Pakistan Journal of Public Health*, (3) 1, 12 - 16. Retrieved from <http://www.hsa.edu.pk>.
- 2) Abor, P.A. (2013). Managing healthcare waste in Ghana: a comparative study of public and private hospitals. *Ghana. International Journal of Health Care Quality Assurance*, 26 (4), 375 - 386. doi:10.1108/09526861311319591.
- 3) Abor, P.A. (2007). Medical Waste Management At Tygerberg Hospital in the Western Cape, South Africa (Masters dissertation, Cape Peninsula University of Technology, Cape Town, South Africa). Retrieved from <http://digitalknowledge.cput.ac.za>.
- 4) Abu-Awwad, M. Q. J. (2008). Medical Waste Management in Primary Health Care Centers and Private Clinics: Jenin District as a Case Study (Masters dissertation, An-Najah National University, Nablus, Palestine). Retrieved from <http://scholar.najah.edu/theses>.
- 5) Akbolat, M., Dede, C., Isik, O. & Saglam, H. (2011). Medical waste management practices in Turkey: A case study in Sakarya. *Pakistan Journal of Medical Sciences*, 27(4), 892 - 895. Retrieved from <http://pjms.com.pk/index.php/pjms/index>.
- 6) Akpieyi, A., Tudor, T.L. & Dutra, C. (2015). The utilisation of risk-based frameworks for managing healthcare waste: A case study of the National Health Service in London. *Safety Science*, 72, 127 - 132. doi:10.1016/j.ssci.2014.08.014.
- 7) Akter, N., Chowdhury, A. M. R. & Kazi, N. M. (1999). Hospital Waste Disposal in Bangladesh with Special Reference to Dhaka City and its Environmental Evaluation. *International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B)*, 87, 2 - 36. Retrieved from <http://research.brac.net/new>.
- 8) Alam, O. & Hossain, M.M. (2013). Quantification and Physical Categorization of Waste Generated by Different Healthcare Entities in Chittagong Metropolitan Area, Bangladesh. (2013, 1 -3 November). Proceedings at International Conference on Mechanical, Industrial and Materials Engineering at Rajshahi, Bangladesh. Retrieved from <http://icmime-ruet.ac.bd>.
- 9) Al-Khatib, I. A., Abu-Dayah, M., Hajjeh, H. & Al-Shanbleh, T. (2011). Solid Medical Waste Management in Healthcare Centers in Palestine. In *Survival and Sustainability* (pp. 545-555). Springer Berlin Heidelberg. doi:10.1007/978-3-540-95991-5_49.
- 10) Allen, R. (2014). Clinical waste management and infection control. *Optometry Today*, 54 (19), 40 - 43. Retrieved from <https://www.aop.org.uk/ot>.
- 11) Ali, H.A. (2000). Clinical waste management in the northern states of Peninsular Malaysia, Sabah and Sarawak.
- 12) Altin, S., Altin, A., Elevli, B. & Cerit, O. (2003). Determination of Hospital Waste Composition and Disposal Methods: a Case Study. *Polish Journal of Environmental Studies*, (12) 2, 251 - 255. Retrieved from <http://www.pjoes.com/index.html>.
- 13) Ambali, A.R, Bakar, A.N. & Merican, F.M. (2013). Environmental Policy In Malaysia: Biomedical Waste, Strategies And Issues. *Journal of Administrative Science*, 10 (1). Retrieved from <http://ir.uitm.edu.my>.
- 14) Ananth, A.P., Prashanthini, V. & Visvanathan, C. (2010). Healthcare waste management in Asia. *Waste Management*, 30 (1), 154 - 161. doi:10.1016/j.wasman.2009.07.018.
- 15) Aravindan, A. & Vasumathi, A. M. (2015). Case study Exploration of Biomedical Waste in Multispecialty Hospital in Madurai. *International Journal of Applied Environmental Sciences*, 10 (1), 347-363. Retrieved from <http://www.researchgate.net/publication/277892778>.
- 16) Asante, B. O., Yanful, E. & Yaokumah, B. E. (2014). Healthcare Waste Management; Its Impact: A Case Study Of The Greater Accra Region, Ghana. *International Journal Of Scientific & Technology Research*, 3(3). Retrieved from <http://www.papers.ssrn.com>.

- 17) Askarian, M., Heidarpour, P. & Assadian, O. (2010). A total quality management approach to healthcare waste management in Namazi Hospital, Iran. *Waste management*, 30(11), 2321-2326. doi:10.1016/j.wasman.2010.06.020.
- 19) Babu, B. R., Parande, A. K., Rajalakshmi, R., Suriyakala, P. & Volga, M. (2009). Management of Biomedical Waste in India and Other Countries: A Review. *Journal of International Environmental Application & Science*, 4(1), 65-78. Retrieved from <http://www.nswaienvvis.nic.in>.
- 20) Bansal, M., Vashisth, S. & Gupta, N. (2013). Knowledge, awareness and practices of dental care waste management among private dental practitioners in Tricity (Chandigarh, Panchkula and Mohali). *Journal of International Society of Preventive & Community Dentistry*, 3(2), 72. doi: 10.4103/2231-0762.122436.
- 21) Bathma, V., Likhar, S. K., Mishra, M. K., Athavale, A. V., Agarwal, S. & Shukla, U. S. (2012). Knowledge assessment of hospital staff regarding biomedical waste management in a tertiary care hospital. *National Journal of Community Medicine*, 3(2). Retrieved from <http://www.njcmindia.org/>
- 22) Bazrafshan, E., Mohammadi, L., Mostafapour, F. K. & Moghaddam, A. A. (2014). Dental solid waste characterization and management in Iran: a case study of Sistan and Baluchestan Province. *Waste Management & Research*, 32(2), 157-164. doi:10.1177/0734242X13520063.
- 23) Bendjoudi, Z., Taleb, F., Abdelmalek, F. & Addou, A. (2009). Healthcare waste management in Algeria and Mostaganem department. *Waste management*, 29(4), 1383-1387. doi: 10.1016/j.wasman.2008.10.008.
- 24) Bhatt, S., Kohli, M., Patel, K., Shah, A. & Gupta, P. (2013). Evaluation of awareness regarding biomedical waste management in Institute of Ophthalmology, Ahmedabad, Gujarat. *National Journal of Integrated Research in Medicine*, 4(2), 32 - 35. Retrieved from <http://www.scopemed.org/?jid=18>.
- 25) Blenkarn, J. I. (2006). Lowering standards of clinical waste management: do the hazardous waste regulations conflict with the CDC's universal/standard precautions? *Journal of Hospital Infection*, 62(4), 467-472. doi: doi:10.1016/j.jhin.2005.09.024.
- 26) Botelho, A. (2012). The impact of education and training on compliance behavior and waste generation in European private healthcare facilities. *Journal of environmental management*, 98, 5-10. doi:10.1016/j.jenvman.2011.12.003.
- 27) Bulucea, C. A. V., Popescu, M. C., Cornea, E. & Olteanu, V. (2008, November 7 - 9). Characterizing biomedical waste in hospitals of Dolj District. Proceedings of WSEAS International Conference on Urban Rehabilitation and Sustainability (URES'08), Environmental Problems and Development at Bucharest, Romania. Retrieved from <http://www.wseas.org/>
- 28) Chaithra, K. M. & Sadashivamurthy, B. M. (2014). Biomedical Waste Management System for Mandya City. *International Journal of Science and Research*, 3(7), 613 - 616. Retrieved from <http://www.ijsr.net>.
- 29) Chaurasia, S., Singh, R., Gupta, A. D. & Kumar, S. (2014). Overview on Biomedical waste of District Hospital Satna (MP), India. *International Journal of Current Science*, 10, 49 - 53. Retrieved from <http://currentsciencejournal.info/index.html>.
- 30) Chen, Y., Ding, Q., Yang, X. et al. (2013). Application countermeasures of non-incineration technologies for medical waste treatment in China. *Waste Management & Research* 31: 1237–1244. doi:10.1177/0734242X13507314.
- 31) Chethana, T., Thapsey, H., Gautham, M. S., Sreekantaiah, P. & Suryanarayana, S. P. (2014). Situation analysis and issues in management of biomedical waste in select small health care facilities in a ward under Bruhat Bengaluru Mahanagara Palike, Bangalore, India. *Journal of community health*, 39(2), 310-315. doi:10.1007/s10900-013-9761-2.
- 32) Chima, N. G., John, A. U., Henrietta, U. C., Chekuba, A. I. & Promise, N. (2014). Hospital waste generation and management practices in Owerri, Nigeria. *African Journal of Environmental Science and Technology*, 8(11), 623-632. doi:10.5897/AJEST2014.1687.

- 33) Chitnis, V., Vaidya, K. & Chitnis, D. S. (2005). Biomedical waste in laboratory medicine: Audit and management. Indian journal of medical microbiology, 23(1), 6. Retrieved from <http://www.ijmm.org/>
- 34) Chitralkha, M. & Agrawal, S. (2010, 14 - 15 June). Waste management: A social Perspective A study with reference to hazardous biomedical waste. Proceedings of International Conference on Economics, Business and Management, IPEDR in Manila, Philippines. Retrieved from <http://ipedr.com>.
- 35) Chowdhary, A. & Slathia, D. Biomedical Waste Management: A Caste Study of Gandhinagar Hospital, Jammu. International Journal of Environmental Research and Development, 4 (4), 287 - 290. Retrieved from <http://ripublication.com/ijerd.htm>.
- 36) Chung, S. S. & Lo, C. W. (2003). Evaluating sustainability in waste management: the case of construction and demolition, chemical and clinical wastes in Hong Kong. Resources, Conservation and Recycling, 37(2), 119-145. Available from <http://www.sciencedirect.com/science/article/pii/S0921344902000757>.
- 37) Cruz, C. P., Garcia, R. C., Colet, P. C., Cruz, J. P. & Alcantara, J. C. (2014). Healthcare Waste Management of the Government Hospitals in Northern Philippines. European Scientific Journal, 10(26). Available from <http://eujournal.org/index.php/esj>.
- 38) Eker, H. H., Bilgili, M. S., Sekman, E. & Top, S. (2010). Evaluation of the regulation changes in medical waste management in Turkey. Waste Management & Research, 28(11), 1034-1038. doi:10.1177/0734242X10366158.
- 39) Eleyan, D., Al-Khatib, I. A. & Garfield, J. (2013). System dynamics model for hospital waste characterization and generation in developing countries. Waste Management & Research, 31 (10), 986 - 995. doi:10.1177/0734242X13490981.
- 40) El-Salam, M. M. A. (2010). Hospital waste management in El-Beheira Governorate, Egypt. Journal of environmental management, 91(3), 618-629. doi:10.1016/j.jenvman.2009.08.012.
- 41) Ferreira, A. P. & Veiga, M. M. (2003). Hospital waste operational procedures: A case study in Brazil. Waste management & research, 21(4), 377-382. Retrieved from <http://wmr.sagepub.com/>
- 42) Gabela, S. D. & Knight, S. E. (2010). Healthcare waste management in clinics in a rural health district in KwaZulu-Natal: brief report. Southern African Journal of Epidemiology and Infection, 25(1), 19-21. Retrieved from <http://saje.co.za/index.php/SAJEI>.
- 43) Giacchetta, G. & Marchetti, B. (2013). Medical waste management: a case study in a small size hospital of central Italy. Strategic Outsourcing: An International Journal, 6(1), 65-84. doi:10.1108/17538291311316072.
- 44) Graikos, A., Voudrias, E., Papazachariou, A., Iosifidis, N. & Kalpakidou, M. (2010). Composition and production rate of medical waste from a small producer in Greece. Waste management, 30(8), 1683-1689. doi:10.1016/j.wasman.2010.01.025.
- 45) Gupta, S., Boojh, R., Mishra, A. & Chandra, H. (2009). Rules and management of biomedical waste at Vivekananda Polyclinic: A case study. Waste management, 29(2), 812-819. doi:10.1016/j.wasman.2008.06.009.
- 46) Haylamicheal, I. D., Dalvie, M. A., Yirsaw, B. D. & Zegeye, H. A. (2011). Assessing the management of healthcare waste in Hawassa city, Ethiopia. Waste Management & Research, 29(8), 854-862. doi: 10.1177/0734242X10379496.
- 47) Hossain, M. S., Balakrishnan, V., Rahman, N. N. N. A., Sarker, M. Z. I. & Kadir, M. O. A. (2012). Treatment of clinical solid waste using a steam autoclave as a possible alternative technology to incineration. International journal of environmental research and public health, 9(3), 855-867. doi: 10.3390/ijerph9030855.
- 48) Ibrahim, Z.B. (2005). Management and Disposal of Clinical Waste (Case Study: Hospital Universiti Kebangsaan Malaysia). (Bachelors dissertation, Universiti Teknologi Malaysia, Johor Bahru, Johor, Malaysia). Retrieved from <http://www.utm.my>.
- 49) Jena, B. & Nayak, P. L. (2014). Assessment of Future Physicians on Biomedical Waste Management in Hospital of Odisha. Middle-East Journal of Scientific Research, 21(9), 1595-1599. doi:10.5829/idosi.mejsr.2014.21.09.21733.

- 50) Johnson, K. M., González, M. L., Dueñas, L., Gamero, M., Relyea, G., Luque, L. E. & Caniza, M. A. (2013). Improving waste segregation while reducing costs in a tertiary-care hospital in a lower-middle-income country in Central America. *Waste Management & Research*, 31(7), 733-738.
- 51) Joshua, I. A., Mohammed, S., Makama, J. G., Joshua, W. I., Audu, O., Nmadu, A. G. & Ogboi, J. B. (2014). Hospital Waste Management as a Potential Hazard in Selected PRIMARY Healthcare Centres in Zaria, Nigeria. *Nigerian Journal of Technology*, 33(2), 215-221. doi:10.4314/njt.v33i2.11.
- 52) Mmereki, D., Baldwin, A., Li, B. and Liu, M., 2017. Healthcare waste management in Botswana: storage, collection, treatment and disposal system. *Journal of Material Cycles and Waste Management*, 19(1), pp.351-365.
- 53) Kang'ethe, S. M. (2008). Clinical waste management in the context of the Kanye community home-based care programme, Botswana. *African Journal of AIDS Research*, 7(2), 187-194. doi:10.2989/AJAR.2008.7.2.4.521.
- 54) Kapoor, D., Nirola, A., Kapoor, V. & Gambhir, R. S. (2014). Knowledge and awareness regarding biomedical waste management in dental teaching institutions in India-A systematic review. *Journal of clinical and experimental dentistry*, 6(4), 419 - 424. doi:10.4317/jced.51565.
- 55) Klangsin, P. (1994). Medical waste treatment techniques used by hospitals in Oregon, Washington, and Idaho. (Masters dissertation, Oregon State University, Oregon, United States of America). Retrieved from <http://hdl.handle.net/1957/36298>.
- 56) Komilis, D., Fouki, A. & Papadopoulos, D. (2012). Hazardous medical waste generation rates of different categories of health-care facilities. *Waste management*, 32(7), 1434-1441. doi:10.1016/j.wasman.2012.02.015.
- 57) Kudoma, B. (2013). An evaluation of clinical waste management in Gaborone city council healthcare facilities. (Masters dissertation, University of South Africa, Pretoria, South Africa). Retrieved from <http://hdl.handle.net/10500/14193>.
- 58) Liao, C. J. & Ho, C. C. (2014). Risk management for outsourcing biomedical waste disposal—Using the failure mode and effects analysis. *Waste management*, 34(7), 1324-1329. doi:10.1016/j.wasman.2014.03.007.
- 59) Longe, E.O. (2012). Healthcare waste management status in Lagos State, Nigeria: a case study from selected healthcare facilities in Ikorodu and Lagos metropolis. *Waste Management & Research*, 30(6): 562–571. doi: 10.1177/0734242X11412109.
- 60) Mano Ranjini, M. S. J. (2000). study to assess the knowledge on Biomedical Waste Disposal among the Group D health workers in Sri Ramakrishna Hospital, Coimbatore. *Asian Pacific Journal of Health*, 1(4), 465 - 470. Retrieved from <http://apjhs.com/>
- 61) Manowan, V. (2009). Awareness and management of hospital waste in developing countries: A case study in Thailand (Doctoral dissertation, The George Washington University, Washington D.C, United States of America). Retrieved from <http://pqdtopen.proquest.com/#viewpdf?dispub=3349629>.
- 62) Marinković, N., Vitale, K., Holcer, N. J., Džakula, A. & Pavić, T. (2008). Management of hazardous medical waste in Croatia. *Waste management*, 28(6), 1049-1056. doi:10.1016/j.wasman.2007.01.021.
- 63) Maroufi, M. & Javadi, M. (2012). Function of nurses and other staff to minimize hospital waste in selected hospitals in Isfahan. *Iranian journal of nursing and midwifery research*, 17(6), 445. Available from <http://www.ijnmr.mui.ac.ir/index.php/ijnmr>.
- 64) Maseko, Q. (2014). Critical Evaluation of Medical Waste Management Policies, Processes and Practices in Selected Rural Hospitals in the Eastern Cape (Masters dissertation, Rhodes University, Grahamstown, South Africa). Retrieved from <http://contentpro.seals.ac.za/iii/cpro/DigitalItemViewPage.external?sp=1013107>.
- 65) Mbongwe, B., Mmereki, B. T. & Magashula, A. (2008). Healthcare waste management: current practices in selected healthcare facilities, Botswana. *Waste management*, 28(1), 226-233. doi:10.1016/j.wasman.2006.12.019.
- 66) Mesdaghinia, A., Naddafi, K., Mahvi, A.H. et al. (2009). Waste management in primary healthcare centers of Iran. *Waste Management & Research* 27: 354–361. doi:10.1177/0734242X09335693.

- 67) Miyazaki, M. & Une, H. (2005). Infectious waste management in Japan: A revised regulation and a management process in medical institutions. *Waste Management* 25: 616–621. doi:10.1016/j.wasman.2005.01.003.
- 68) Mmereki, D., Baldwin, A., Li, B. & Liu, M. (YEAR?). Healthcare waste management in Botswana: storage, collection, treatment and disposal system. *Journal of Material Cycles and Waste Management*, 1-15. doi:10.1007/s10163-015-0429-0.
- 69) Mochungong, P. I. K. (2011). Environmental Exposure and Public Health Impacts of Poor Clinical Waste Treatment and Disposal in Cameroon. (Doctoral dissertation, University of Southern Denmark, Odense, Denmark). Retrieved from <http://syddansk.summon.serialssolutions.com/en/advanced#!/search>.
- 70) Mohamed, L. F., Ebrahim, S. A. & Al-Thukair, A. A. (2009). Hazardous healthcare waste management in the Kingdom of Bahrain. *Waste management*, 29(8), 2404-2409. doi:10.1016/j.wasman.2009.02.015.
- 71) Moritz, J. M. (1995). Current legislation governing clinical waste disposal. *Journal of Hospital Infection*, 30, 521-530. Retrieved from <http://www.journalofhospitalinfection.com/>
- 72) Mziray, R. (2009). Comparative study of hospital waste management and separation at site case study of Tampere University Hospital in Tampere, Finland and Muhimbili National Hospital in Dar-es-Salam, Tanzania. (Bachelors dissertation, Tampere University of Applied Sciences, Tampere, Finland). Retrieved from <https://www.theseus.fi/>
- 73) Naik, A., Modi, B., & Bansal, R. K. (2012). Bio-medical waste handling practices in urban health centres of Surat Municipal Corporation. *National Journal of Community Medicine*, 3(1), 164 - 167. Retrieved from <http://www.njcmindia.org/>
- 74) Nayak, S. & Nayak, V. (2014). Knowledge And Attitude of Nurses on Biomedical Waste Management: A Cross Sectional Study. *Journal of Pharmaceutical and Biomedical Sciences*, 4(8), 733-736. Retrieved from <http://jpbms.info/>
- 75) Nema, A., Pathak, A., Bajaj, P., Singh, H. & Kumar, S. (2011). A case study: biomedical waste management practices at city hospital in Himachal Pradesh. *Waste Management & Research*, 29(6), 669-673. doi:10.1177/0734242X10396753.
- 76) Nemathaga, F., Maringa, S. & Chimuka, L. (2008). Hospital solid waste management practices in Limpopo Province, South Africa: A case study of two hospitals. *Waste management*, 28(7), 1236-1245. doi:10.1177/0734242X10396753.
- 77) Ngwuluka, N., Ocheke, N., Odumosu, P. & John, S. A. (2009). Waste management in healthcare establishments within Jos Metropolis, Nigeria. *African Journal of environmental science and technology*, 3(12). Retrieved from <http://www.ajol.info/index.php/ajest>.
- 78) Oroei, M., Momeni, M., Palenik, C. J., Danaei, M. & Askarian, M. (2014). A qualitative study of the causes of improper segregation of infectious waste at Nemazee Hospital, Shiraz, Iran. *Journal of infection and public health*, 7(3), 192-198. doi:10.1016/j.jiph.2014.01.005.
- 79) Paiz, J. C., Bigolin, M., Schneider, V. E. & Stedile, N. L. R. (2014). Applying Nightingale charts to evaluate the heterogeneity of biomedical waste in a Hospital. *Revistalatio-americana de enfermagem*, 22(6), 942-949. doi:10.1590/0104-1169.3309.2499.
- 80) Manga, V.E., Forton, O.T., Mofor, L.A. and Woodard, R., 2011. Health care waste management in Cameroon: A case study from the Southwestern Region. *Resources, Conservation and Recycling*, 57, pp.108-116
- 81) Patil, Y. D. (2015). Disposal of Bio-medical Waste in India. *Journal of Krishna Institute of Medical Sciences University*, 4 (1), 188 - 192. Retrieved from <http://jkimsu.com/>
- 82) Patwary, M. A., O'Hare, W. T., Street, G., Elahi, K. M., Hossain, S. S. & Sarker, M. H. (2009). Quantitative assessment of medical waste generation in the capital city of Bangladesh. *Waste management*, 29(8), 2392-2397. doi:10.1016/j.wasman.2009.03.021.
- 84) Phengxay, S., Okumura, J., Miyoshi, M. et al. (2005). Health-care waste management in Lao PDR: A case study. *Waste Management & Research* 23: 571–581. doi:10.1177/0734242X05059802.

- 85) Prakash, B., Varma, R. K., Kulkarni, P., Kavitha, H. S. & Renuka, M. (2015). Knowledge, Attitude and Practices Regarding Biomedical Waste Management among the Health Care Providers at a Tertiary Care Centre in Mysore City. *International Journal of Health Sciences and Research (IJHSR)*, 5(9), 30-35. Retrieved from <http://www.ijhsr.org/>
- 86) Pudussery, K. P. (2010). Study On the Medical Waste Management in the Norfolk AND Norwich University Hospital (Masters Thesis. University of East Anglia, Norwich, United Kingdom). Retrieved from <https://ueaeprints.uea.ac.uk/>
- 87) Qdais, H. A., Rabi, A. & Abdulla, F. (2007). Characteristics of the medical waste generated at the Jordanian hospitals. *Clean Technologies and Environmental Policy*, 9(2), 147-152. doi:10.1007/s10098-006-0077-0.
- 88) Rahman, H. & Ali, M. (2000, 5 - 9 November). Healthcare waste management in developing countries. Proceedings of 26th WEDC Conference on Water, Sanitation and Hygiene: Challenges of the Millenium in Dhaka, Bangladesh. Retrieved from <https://dspace.lboro.ac.uk/2134/2103>.
- 89) Rajor, A., Xaxa, M. & Mehta, R. (2012). An overview on characterization, utilization and leachate analysis of biomedical waste incinerator ash. *Journal of environmental management*, 108, 36-41. doi:10.1016/j.jenvman.2012.04.031.
- 90) Rathod, D., Jadav, J. & Vaghela, S. (2012). Evaluation of awareness programme on practices of biomedical waste management at Teaching Hospital, Ahmedabad. *International Journal of Current Research and Review*, 4(19), 159-164. Available from <http://www.ijcrr.com/>
- 91) Saad, S. A. G. (2013). Management of hospitals solid waste in Khartoum State. *Environmental monitoring and assessment*, 185(10), 8567-8582. doi:10.1007/s10661-013-3196-1.
- 92) Sabour, M. R., Mohamedifard, A. & Kamalan, H. (2007). A mathematical model to predict the composition and generation of hospital wastes in Iran. *Waste Management*, 27(4), 584-587. doi:10.1016/j.wasman.2006.05.010.
- 93) Sanjeev, R., Kuruvilla, S., Subramaniam, R., Prashant, P. S. & Gopalakrishnan, M. (2014). Knowledge, attitude, and practices about biomedical waste management among dental healthcare personnel in dental colleges in Kothamangalam: a cross-sectional study. *Health Sciences*, 1(3), 1-12. Retrieved from <http://healthsciences.ac.in/jan-mar-14/>
- 94) Sapkota, B., Gupta, G. K. & Mainali, D. (2014). Impact of intervention on healthcare waste management practices in a tertiary care governmental hospital of Nepal. *BMC public health*, 14(1), 1 - 8. Retrieved from <http://www.biomedcentral.com/1471-2458/14/1005>.
- 95) Sawalem, M., Selic, E. & Herbell, J. D. (2009). Hospital waste management in Libya: A case study. *Waste Management*, 29(4), 1370-1375. doi:10.1016/j.wasman.2008.08.028.
- 96) Sehgal, R. K., Garg, R., Dhot, P. S. & Singhal, P. (2015). A study of knowledge, attitude, and practices regarding biomedical waste management among the health-care workers in a multispeciality teaching hospital at Delhi. *International Journal*, 4(11), 1 - 5. doi:10.5455/ijmsph.2015.25062015315.
- 97) Singh, H., Bhaskar, D. J., Dalai, D. R., Rehman, R. & Khan, M. (2014). Dental Biomedical Waste Management. *International Journal of Scientific Study*, 2(4), 66 - 68. Retrieved from <http://www.ijss-sn.com/>
- 98) Silva, D.E.C., Hoppe, E.A., Ravanello, M.M. et al. (2005). Medical wastes management in the south of Brazil. *Waste Management* 25: 600–605. doi:10.1016/j.wasman.2004.03.002.
- 99) Soliman, S. M. & Ahmed, A. I. (2007). Overview of biomedical waste management in selected Governorates in Egypt: A pilot study. *Waste management*, 27(12), 1920-1923. doi:10.1016/j.wasman.2006.08.009.

- 100) Spence, A. (2000). The Development of a model program for the effective management of biomedical waste in the Caribbean. A Review of barriers within public hospitals in the Caribbean (Masters dissertation, Rochester Institute of Technology, New York, United States of America). Retrieved from <https://ritdml.rit.edu>.
- 101) Shanmugasundaram, J., Soulalay, V. & Chettiyappan, V. (2012). Geographic information system-based healthcare waste management planning for treatment site location and optimal transportation routeing. *Waste Management & Research*, 30(6), 587-595. doi:10.1177/0734242X11427941.
- 102) Sumi, N. (2010). Study of Biomedical waste management practices in a private hospital and evaluation of the benefits after implementing remedial measures for the same. *Journal of Communicable Diseases*, 42(1), 39. Retrieved from [http://ismocd.org/INDEX.asp?page=jcd/jcd_frames.asp?vol=38_1\](http://ismocd.org/INDEX.asp?page=jcd/jcd_frames.asp?vol=38_1)
- 103) Tadesse, M. L. & Kumie, A. (2014). Healthcare waste generation and management practice in government health centers of Addis Ababa, Ethiopia. *BMC public health*, 14(1), 1221. doi:10.1186/1471-2458-14-1221.
- 104) Taghipour, H. & Mosaferi, M. (2009). Characterization of medical waste from hospitals in Tabriz, Iran. *Science of the total environment*, 407(5), 1527-1535. doi: 10.1016/j.scitotenv.2008.11.032.
- 105) Tam, Y. M. (1996). Clinical waste management and its future development in Hong Kong (Masters dissertation, The University of Hong Kong, Pokfulam, Hong Kong). Retrieved from <http://hub.hku.hk/>
- 106) Taru, P. & Kuvarega, A. T. (2005). Solid medical waste management. The case of Parirenyatwa Hospital, Zimbabwe. *Revista Biomédica*, 16, 153-158. Retrieved from <http://new.medigraphic.com/cgi-bin/publicacionesI.cgi?IDREVISTA=90&NOMBRE=Revista%20Biom%E9dica>.
- 107) Tesfahun, E., Kumie, A., Legesse, W. et al. (2014) Assessment of composition and generation rate of healthcare wastes in selected public and private hospitals of Ethiopia. *Waste Management & Research* 32: 215–220. doi: 10.1177/0734242X14521683.
- 108) Cheng, Y.W., Sung, F.C., Yang, Y., Lo, Y.H., Chung, Y.T. and Li, K.C., 2009. Medical waste production at hospitals and associated factors. *Waste Management*, 29(1), pp.440-444.
- 109) Tsakona, M., Anagnostopoulou, E. & Gidararakos, E. (2007). Hospital waste management and toxicity evaluation: a case study. *Waste management*, 27(7), 912-920. doi:10.1016/j.wasman.2006.04.019.
- 110) Turaki, A. I. (2015). Assessment of knowledge attitudes and practices of biomedical waste management among waste handlers and FMC, Yola and AKTH, Kano (Bachelors dissertation, American University of Nigeria, Adamawa, Nigeria). Retrieved from <http://gsdlserver.aun.edu.ng/greenstone/cgi-bin/library.cgi?site=localhost&a=p&p=about&c=aunthesi&l=en&w=big5>.
- 111) Ujwala, U., Ramasankaram, K., Satyanarayan, D. & Appajirao, N. N. (2012). Awareness about biomedical waste management in undergraduate medical and nursing students at a teaching institute in Vizianagaram, Andhra Pradesh. *National Journal of Community Medicine*, 3(3), 428 - 432. Retrieved from <http://njcmindia.org/>
- 112) Uysal, F. & Tinmaz, E. (2004). Medical waste management in Trachea region of Turkey: suggested remedial action. *Waste management & research*, 22(5), 403-407. Retrieved from <http://wmr.sagepub.com/>

Table S4. Coding framework used for the studies included in the scoping review.

Eligibility

Studies were included if they defined and categorised health care waste and were coded based on the coding categories below.

Sources of literature

- ☐ Dissertation
- ☐ Journal

Information used to code

- ☐ All full-text articles

Country focus

- ☐ High income countries
- ☐ Low- and middle-income countries

Study design

- ☐ Case study
- ☐ Commentary
- ☐ Cross-sectional study
- ☐ Document analysis experiment
- ☐ Literature review
- ☐ Systematic review
- ☐ Quantitative
- ☐ Qualitative
- ☐ Mixed method

Academic disciplines

- ☐ Applied ecology
- ☐ Biotechnology and bioinformatics
- ☐ Biological sciences
- ☐ Community medicine
- ☐ Community health nursing
- ☐ Environmental and developmental sociology
- ☐ Environmental engineering
- ☐ Energy and environment
- ☐ Environmental health
- ☐ Environmental management
- ☐ Environmental resources and development
- ☐ Forensic medicine
- ☐ Environmental sciences
- ☐ Laboratory medicine
- ☐ Law
- ☐ Microbiology
- ☐ Public health
- ☐ Preventive medicine
- ☐ Process engineering and applied sciences
- ☐ Pharmaceutical sciences
- ☐ Public health dentistry
- ☐ Waste management engineering
- ☐ Not clearly stated

Terminologies used to describe health care waste

- ☐ Biomedical waste
- ☐ Clinical waste
- ☐ Health care waste
- ☐ Medical waste
- ☐ Hospital waste

Categories of health care waste

- ☐ Non-hazardous
- ☐ Hazardous

Topics discussed by the studies

- ☐ Health care waste management practices
- ☐ Knowledge and attitudes of health care staff
- ☐ Policies on health care waste management
- ☐ Segregation and quantification of health care waste
- ☐ Health care waste treatment and disposal
- ☐ Risks associated with health care waste management
- ☐ Models for health care waste management

