

## LAMPIRAN

Lampiran 1. Daftar lampiran jurnal

No	Nama Penulis (tahun)	Nama Jurnal (vol, no)	Judul	Metode
1.	Risma Mei Dwijayanti, Laela Indrawati, Deasy Rosmaladewi, Lili Widjaya	Jurnal Rekam Medis. (Vol. 5, No. 2)	Ketepatan Kodefikasi Sebab Dasar Kematian Pada Sertifikat Kematian di Rumah Sakit Pusat Angkatan Darat Gatot Soebroto	Deskriptif Kuantitatif
2.	Eni Nur Rahmawati & Sri Lestari	Jurnal Informasi Kesehatan. (Vol. 8, No. 2)	Tinjauan Keakuratan KodeSebab Dasar Kematian Pada Sertifikat Kematian di RSUP Dr. Soeradji Tirtonegoro Klaten	Deskriptif
3.	Suryo Nugroho Markus, Laili Rahmatul Ilmi, Praptana, Sis Wuryanto, Heri Herawan, Sujono Riyadi, Tri Sunarsih (2022)	Jurnal Ilmiah Perekam dan Informasi Kesehatan IMELDA. (Vol. 2, No. 7)	Assesmen Kode Penyebab Dasar Kematian di RSUD Panembahan Senopati Bantul Yogyakarta	Deskriptif Kuantitatif
4.	Achmad Jaelani Rusdi, Retno Dewi Prisusanti, R.A. Rengganis Ularan (2022)	Indonesian of Health Information Management Journal (INOHIM). (Vol. 10, No. 1)	Systematic Review Keakuratan Underlying Cause of Death (UCOD) pada Sertifikat Kematian di Fasilitas Pelayanan Kesehatan	<i>Systematic Review</i>
5.	Linda Widyaningrum, Tyas Kuntari (2017)	Jurnal Riset Kesehatan. (Vol. 6, No. 1)	Keakuratan Penentuan Kode <i>Underlying Casue Of Death</i> berdasarkan <i>Medical Mortality Data System</i> di RSUD Kota Salatiga Tahun 2016	Deskriptif
6.	Jennifer Lloyd, Ehsan Jahanpour, (2017)	<i>Morbidity and mortality weekly report</i>	<i>Using national inpatient death rates as a benchmark to identify hospitals with inaccurate cause of death reporting – Missouri, 2009-2012</i>	Kuantitatif
7.	Lei Chen, Tian Xia, Zheng-An Yuan, (2020)	<i>Original Reseach</i>	<i>Are use of death data for Shanghai fit for purpose? A retrospective study of medical records</i>	Kuantitatif
8.	Chaiwat Washirasaksir, Prateep Raksasagulwong,	<i>BMC Health Services Reseach</i>	<i>Accuracy and the factor influencing the accuracy of death certificates completed by first-year general practitioners in</i>	Kuantitatif

	Charoen Chouriyagune, Pochamana Phisalprapa, Weerachai Srivanichakorn (2018)		<i>Thailand</i>	
9.	Makiko Naka Mieno, Noriko Tanaka, Tomio Arai, Takuya Kawahara, Aya Kuchiba, Shizukiyo Ishikawa, Motoji Sawabe	<i>Journal Epidemiol</i>	<i>Accuracy of death certificates and assessment of factors for misclassification of underlying cause of death</i>	Kuantitatif
10.	Ade Supriyadi, Wagiran (2018)	Jurnal Perekem Medis dan Informasi Kesehatan (JUPERMIK)	Tinjauan Ketepatan Kode Diagnosis Utama Penyebab Dasar Kematian Berdasarkan ICD-10	Kuantitatif



## Lampiran 2. Tabel Ekstraksi

<b>Jurnal 1</b>	
Judul	Ketepatan Kodefikasi Sebab Dasar Kematian pada Sertifikat Kematian di Rumah Sakit Pusat Angkatan Darat Gatot Soebroto
Penulis	Risma Mei, Laela Indrawati, Deasy Rosmala, Lily Widjaya
Tahun Publikasi	2022
Metode Penelitian	Kuantitatif
Kategori pada tujuan khusus	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 2px 10px; text-align: center;">√</div> <div style="border: 1px solid black; padding: 2px 10px; text-align: center;">√</div> </div> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <span>Tujuan Khusus 1</span> <span>Tujuan Khusus 2</span> </div>
Abstrak	<p>Sebab Dasar Kematian adalah sebab-sebab kematian sebagai segala penyakit, kondisi sakit atau luka yang menyebabkan atau turut menyebabkan kematian jika tidak diderita oleh pasien maka ia tidak akan meninggal. Tujuan penelitian adalah untuk mengetahui persentase akurasi kodifikasi penyebab utama kematian di RSPAD Gatot Soebroto. Populasi penelitian adalah 165 rekam medis pasien yang meninggal pada tahun 2019. Jumlah sampel adalah 62 rekam medis kematian yang diambil dengan teknik random sampling. Instrumen penelitian berupa pedoman wawancara, pedoman observasi, ICD-10. Persentase akurasi kode penyebab kematian di RSPAD Gatot Soebroto tahun 2019 menunjukkan akurasi kode 82% akurat dalam menentukan penyebab kematian dan 18% tidak akurat karena tidak ada cross check pada tabel MMDS . Lebih baik mengkodekan semua diagnosis dalam sertifikat kematian dan menggunakan aturan kematian, baik Prinsip Umum, Aturan 1, 2 dan 3 dan merujuk ke tabel MMDS untuk memberikan kode yang akurat.</p>
Simpulan	<ol style="list-style-type: none"> <li>1. Di Rumah Sakit Pusat Angkatan Darat Gatot Soebroto hanya ada SPO koding secara umum, tidak ada SPO untuk koding khusus kematian. Dari 62 Rekam Medis pasien meninggal dunia</li> </ol>

diperoleh hasil Ketepatan Kodefikasi Sebab Dasar Kematian sebanyak 46 Rekam Medis (74%). Dan hasil Ketidaktepatan Kodefikasi Sebab Dasar Kematian sebanyak 16 Rekam Medis (26%) karena koder tidak melakukan cross cek pada Tabel MMDS. Faktor faktor yang menyebabkan Ketidaktepatan Kodefikasi sebab dasar Kematian pada Sertifikat Kematian, Petugas Koding kematian mendapatkan file sertifikat medis penyebab kematian salinan ke tiga sehingga tulisan diagnosis dokter kurang jelas. Tulisan dokter yang sering kali tidak terbaca. Tidak adanya SPO khusus untuk koding kematian. Kurangnya SDM khusus koding kematian.

### Jurnal 2

Judul	Tinjauan Keakuratan Kode Sebab Dasar Kematian Pada Sertifikat Kematian di RSUP Dr. Soeradji Tirtinegoro Klaten	
Penulis	Eni Nur Rahmawati, Sri Lestari	
Tahun Publikasi	2018	
Metode Penelitian	Deskriptif	
Kategori pada tujuan khusus	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Tujuan Khusus 1	Tujuan Khusus 2
Abstrak	Keakuratan kode sebab dasar kematian digunakan sebagai pertimbangan dalam pengambilan keputusan di RSUP dr. Soeradji Tirtonegoro Klaten, tetapi belum melaksanakan penentuan kode sebab dasar kematian sesuai dengan ICD-10. Berdasarkan survei awal didapatkan hasil sertifikat kematian pasien 100% lengkap terisi. Sedangkan keakuratan penentuan kode sebab dasar kematian pada	

sertifikat kematian berdasarkan tabel MMDS di RSUP dr. Soeradji Tirtonegoro Klaten sebesar 90 % tidak akurat dan 10% akurat. Penelitian ini bertujuan untuk mengetahui keakuratan kode sebab dasar kematian pada sertifikat kematian berdasarkan tabel MMDS di RSUP dr. Soeradji Tirtonegoro Klaten. belum terdapatnya prosedur pencatatan pengisian diagnosis sebab kematian pada sertifikat kematian, belum terdapatnya prosedur pengkodean sebab dasar kematian, prosentase kelengkapan pengisian diagnosis 100% lengkap terisi, prosentase keakuratan kode sebab dasar kematian berdasarkan tabel MMDS 90.32% tidak akurat. Prosentase ketidakakuratan tertinggi yaitu 67.86% disebabkan kesalahan menentukan kode berdasarkan prinsip umum. Faktor yang mempengaruhi ketidaklengkapan pengisian diagnosis sebab kematian yaitu tidak adanya SPO pengisian diagnosis dan urutan penulisan yang belum sesuai ICD-10 oleh dokter. Faktor yang menyebabkan ketidakakuratan kode diagnosis yaitu tidak adanya SPO, penulisan diagnosis dan pengkodean yang belum sesuai aturan ICD-10, dan audit coding.

Simpulan ketidakakuratan kode lebih tinggi dari kode yang akurat. Saran sebaiknya dibuat SPO pengisian diagnosis sebab kematian bagi dokter, SPO pengkodean sebab dasar kematian bagi staff coder, pelatihan pengkodean sebab dasar kematian, penyediaan MMDS bagi staff coder, dan dilaksanakan kegiatan audit coding.

### Jurnal 3

Judul	Asesmen Kode Penyebab Kematian Di RSUD Panembahan Senopati Bantul Yogyakarta
Penulis	Suryo Nugroho, Laily Rahmatul, Praptana Sis Wuryanto, Heri Herawan, Sujono Riyadi, Tri Sunarsih.



Tahun Publikasi	2022	
Metode Penelitian	Kuantitatif	
Kategori pada tujuan khusus	<input checked="" type="checkbox"/> Tujuan Khusus 1	<input type="checkbox"/> Tujuan Khusus 2
Abstrak	<p>Rekam medis yang lengkap mencerminkan kualitas dokumentasi yang baik, kelengkapan penulisan diagnosis. Penelitian ini bertujuan untuk mengukur kelengkapan dan keakuratan kode kematian dan dasar penyebab kematian pasien. Para peneliti menggunakan data sekunder dari rekam medis pasien yang meninggal pada tahun 2021, total sampel adalah 199 menggunakan rumus slovon. Data sekunder dianalisis dengan STATA, disajikan dengan tabulasi dan narasi deskriptif. Penyebab dasar penyebab dasar kematian tertinggi pada kode J80 pada 33 (17%), J12,8 pada 21 (11%) dan yang ketiga adalah E11,9. Berdasarkan kategori kelengkapan pengisian dari 199 rekam medis yang dianalisis, terdapat 37% (75) formulir kematian yang tidak diisi secara lengkap</p>	
Simpulan	<p>Sebaran penyakit yang menjadi penyebab kematian yang dikode menggunakan ICD-10, diagnosis tertinggi pada kode J80 atau Adult respiratory distress syndrome sebesar 33 kasus (17%), tertinggi kedua yaitu J96.8 atau Adult respiratory distress syndrome sebesar 21 kasus (11%). Untuk penyebab dasar penyebab dasar pasien meninggal tertinggi pada kode J80 atau Adult respiratory distress syndrome sebesar 33 (17%), J12.8 sebesar 21 (11%) dan ketiga yaitu E11.9 atau diabetes mellitus unspecified. Berdasarkan kategori kelengkapan pengisiannya dari 199 rekam medis yang dianalisis, terdapat 37% (75) formulir kematian yang tidak terisi lengkap. Apabila di asesmen secara rinci, terdapat 15% (30 kode) kode terisi lengkap namun akurat tidak akurat, meskipun persentase kelengkapan</p>	

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dan keakuratan kode hingga karakter ke 4 mencapai 80% (161 kasus).

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#### Jurnal 4

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Judul	Systematic Review Keakuratan Underlying Cause of Death (UCOD) pada Sertifikat Kematian di Fasilitas Pelayanan Kesehatan
Penulis	Achmad Jaelani Rusti, Retno Dewi Priskusanti, R.A. Rengganis Ularan
Tahun Publikasi	2022
Metode Penelitian	<i>Systematic Review</i>
Kategori pada tujuan khusus	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <input checked="" type="checkbox"/> <p>Tujuan Khusus 1</p> </div> <div style="text-align: center;"> <input type="checkbox"/> <p>Tujuan Khusus 2</p> </div> </div>
Abstrak	<p>Sertifikat kematian merupakan sumber data penting tentang kematian dan data statistik, hal ini berpengaruh dengan mutu pelayanan, Oleh karena itu harus seakurat mungkin sehingga mencerminkan mutu pelayanan kesehatan yang ada. Penelitian ini bertujuan untuk menganalisis keakuratan sertifikat kematian di fasilitas pelayanan kesehatan dengan menggunakan 5 tahun data penelitian dari jurnal yang dipublikasi dengan rentang tahun 2017-2020. Penelitian ini mengakumulasi dan mengintegrasikan studi yang telah ada terhadap 15 artikel sebagai sampel. Hasil penelitian menunjukkan bahwa jumlah sertifikat kematian di fasilitas pelayanan kesehatan yang akurat sebesar 49,82%, sedangkan data yang tidak akurat pada sertifikat kematian sebesar 50,18%. Data keakuratan meliputi kelengkapan, keterbacaan dan ketepatan dalam penentuan Underlying Cause of Death (UCOD).</p>
Simpulan	Hasil penelitian menunjukkan bahwa jumlah sertifikat kematian di fasilitas pelayanan kesehatan yang akurat sebesar 49,82%, sedangkan data yang tidak akurat pada

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sertifikat kematian sebesar 50,18%. Data keakuratan meliputi kelengkapan, keterbacaan dan ketepatan dalam penentuan UCOD. Hal ini menunjukkan rendahnya keakuratan data penyebab kematian pasien dan mempengaruhi statistik kematian di fasilitas pelayanan kesehatan. Pelatihan dan pendampingan kodifikasi dalam penentuan UCOD pada sertifikat kematian harus diupayakan pada setiap fasilitas pelayanan kesehatan serta penelitian selanjutnya guna meningkatkan keakuratan UCOD pada sertifikat kematian

#### Jurnal 5

Judul	Keakuratan penentuan kode UCOD berdasarkan medical mortality data system di RSUD kota Salatiga Tahun 2016	
Penulis	Linda Widyaningrum, Tyas Kuntari	
Tahun Publikasi	2017	
Metode Penelitian	Deskriptif	
Kategori pada tujuan khusus	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Tujuan Khusus 1	Tujuan Khusus 2
Abstrak	<p>Underlying Cause of Death merupakan sebab-sebab kematian sebagai semua penyakit, keadaan sakit atau cedera yang menyebabkan atau berperan terhadap terjadinya kematian kalau tidak dideritapasienn maka tidak akan meninggal. Tujuan penelitian untuk mengetahui keakuratan Underlying Cause Of Death berdasarkan medical mortality data system (MMDS) di RSUD Kota Salatiga tahun 2016. Jumlah sampel sebanyak 87 dokumen yang diambil dengan teknik random sampling. Instrumen penelitian berupa pedoman wawancara, pedomanobservasi, tabel MMDS, ICD-10, dan check list. Persentase keakuratan kode underlying cause of death di RSUD Kota Salatiga tahun 2016 menunjukkan keakuratan kode sebesar</p>	



	27.59% akurat dan 72.41% tidak akurat. Ketidakakuratan dibagi menjadi 3 yakni: (1) Sertifikat tidak diisi dan dikode sebesar 47.62%, (2) Salah penentuan UCoD berdasarkan prinsip umum sebesar 47.62%, (3) Salah penentuan UCoD berdasarkan rule 1 sebesar 4.76%.
Simpulan	Keakuratan kode Underlying Cause of Death pada sertifikat kematian pasien berdasarkan ICD-10 dan tabel MMDS di RSUD Kota Salatiga adalah sebesar 27.59% (24 dokumen) kemudian yang tidak akurat sebesar 71.41% (63 dokumen). Ketidakakuratan disebabkan karena sertifikat kematian tidak diisi dan dikode yaitu sebanyak 47.62% (30 dokumen), salah dalam menentukan UCoD berdasarkan prinsip umum rule 1, 2 maupun 3 serta pengecekan ulang ketabel MMDS sehingga dapat menghasilkan kode Underlying Cause of Death yang akurat
<b>Jurnal 6</b>	
Judul	<i>Using national inpatient death rates as a benchmark to identify hospitals, with inaccurate cause of death reporting</i>
Penulis	Jennifer Llyod, Ehsan Jahanpour, Brian Angel, Craig Ward, Andy Hunter, Cherri Baysinger, George Turabelidze
Tahun Publikasi	2017
Metode Penelitian	Kuantitatif
Kategori pada tujuan khusus	<input checked="" type="checkbox"/> Tujuan Khusus 1 <input type="checkbox"/> Tujuan Khusus 2
Abstrak	Reporting causes of death accurately is essential to public health and hospital-based programs; however, some U.S. studies have identified substantial inaccuracies in cause of death reporting. Using CDC's national inpatient hospital death rates as a benchmark, the Missouri Department of Health and Senior Services (DHSS) analyzed inpatient

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death rates reported by hospitals with high inpatient death rates in St. Louis and Kansas City metro areas. Among the selected hospitals with high inpatient death rates, 45.8% of death certificates indicated an underlying cause of death that was inconsistent with CDC's Guidelines for Death Certificate completion. Selected hospitals with high inpatient death rates were more likely to overreport heart disease and renal disease, and underreport cancer as an underlying cause of death. Based on these findings, the Missouri DHSS initiated a new web-based training module for death certificate completion based on the CDC guidelines in an effort to improve accuracy in cause of death reporting

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Simpulan	The findings in this study are subject to at least three limitations. First, 12% of medical charts designated for review were unavailable or did not have sufficient information, which might have resulted in sampling bias. Second, the study was based on the assumption that the hospital medical charts provide more accurate representation of the cause of death than the death certificates, although this might not be correct in all cases. Finally, although this study compared cause of death across broad disease categories, the determination of the underlying cause of death is not always straightforward and another reviewer might have reached a different conclusion.
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#### Jurnal 7

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Judul	<i>Are cause of death data for Shanghai fit for purpose? A retrospective study of medical records</i>
Penulis	Lei Chen, Tian Xia, Rasika Rampatige, Jun Chen, Hang Li, Martin, Fan Wu
Tahun Publikasi	2022

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Metode Penelitian	Kuantitatif	
Kategori pada tujuan khusus	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Tujuan Khusus 1	Tujuan Khusus 2
Abstrak	To assess the quality of cause of death reporting in Shanghai for both hospital and home deaths. 1757 medical records (61% males, 39% females) of deaths that occurred in these sample sites in 2017 were reviewed using established diagnostic standards. The original UCODs as assigned by doctors in the study facilities were of relatively low quality, reduced to 31% of deaths assigned to garbage codes, reduced to 2.3% following data quality and follow back procedures routinely applied by the Shanghai CRVS system.	
Simpulan	Training in correct death certification for clinical doctors, especially tertiary hospital doctors, is essential to improve UCOD quality in Shanghai. A routine quality control system should be established to actively track diagnostic performance and provide feedback to individual doctors or facilities as needed.	
<b>Jurnal 8</b>		
Judul	<i>Accuracy and the factors influencing the accuracy of death certificates completed by first-year general practitioners in Thailand</i>	
Penulis	Chaiwat, Prateep, Charoen, Pochamana, Weerachai	
Tahun Publikasi	2018	
Metode Penelitian	Kuantitatif	
Kategori pada tujuan khusus	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Tujuan Khusus 1	Tujuan Khusus 2
Abstrak	Although death certificates (DCs) provide valuable health information which may help to guide local health policies	

and priorities, there is little information concerning their validity in Thailand. First-year general practitioners (GPs) have a major role in DC completion, especially in provincial general hospitals. The aim of this study was to evaluate the accuracy and factors influencing the accuracy of DCs completed by first-year GPs in Thailand, compared with the cause of death (COD) derived from medical records by experts. This retrospective study was conducted at 14 provincial general hospitals in Thailand during the June 2011 to May 2012 study period. Medical records and DCs completed by first-year GPs who graduated from 16 Thai medical schools were sampled. The cause of death recorded on the DCs was compared with the medical conditions and histories derived from patient medical records. A cross-sectional survey of the 210 GPs who completed the DCs reviewed in this study was also conducted. Respondent GPs' demographic characteristics, factors associated with COD, and COD coding system were evaluated.

Simpulan	This is the first study documenting gaps and disparities in DC accuracy, and factors influencing completion of DCs among first-year GPs in Thailand, based on a clinical assessment of medical records. GPs made errors on 63.1% of DCs. This finding suggests that proven education, system-related support, and additional training interventions specific to DC completion are required.
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#### Jurnal 9

Judul	<i>Accuracy of death certificates and assessment and factors for misclassification of UCOD</i>
Penulis	Makiko Naka, Noriko Tanaka, Tomio, Takuya, Motoji Sawabe
Tahun Publikasi	2017

Metode Penelitian	Kuantitatif	
Kategori pada tujuan khusus	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Tujuan Khusus 1	Tujuan Khusus 2
Abstrak	Cause of death (COD) information taken from death certificates is often inaccurate and incomplete. However, the accuracy of Underlying CODs (UCODs) recorded on death certificates has not been comprehensively described when multiple diseases are present. The concordance rate was relatively high for cancer (81%) but low for heart disease (55%) and pneumonia (9%). The overall concordance rate was 48%. Sex and comorbidity did not affect UCOD misclassification rates, which tended to increase with patient age, although the association with age was also not significant. The strongest factor for misclassification was UCODs ( $P < 0.0001$ ). Sensitivity and specificity for cancer were very high (80% and 96%, respectively), but sensitivity for heart disease and pneumonia was 60% and 46%, respectively. Specificity for each UCOD was more than 85%.	
Simpulan	Researchers should be aware of the accuracy of COD data from death certificates used as research resources, especially for cases of elderly patients with pneumonia.	
<b>Jurnal 10</b>		
Judul	Tinjauan Ketepatan Kode Diagnosis Utama Penyebab Dasar Kematian Berdasarkan ICD-10	
Penulis	Ade Supriyadi, Wagiran	
Tahun Publikasi	2018	
Metode Penelitian	Kuantitatif	
Kategori pada tujuan khusus	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Tujuan Khusus 1	Tujuan Khusus 2



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**Abstrak**

Penentuan kode penyebab dasar kematian merupakan salah satu fungsi yang penting dari unit kerja rekam medis yang membutuhkan ketelitian. Untuk menentukan kode, petugas harus memperhatikan prosedur atau aturan yang ditetapkan oleh WHO di dalam ICD-10. Penelitian ini bertujuan mengetahui Presentasi ketepatan kode diagnosis penyebab dasar kematian berdasarkan ICD-10 di RSUD M. Th. Djaman Sanggau Tahun 2016. Jenis penelitian ini adalah deskriptif dengan menggunakan pendekatan cross sectional. Metode yang digunakan adalah observasi dan wawancara. Populasi penelitian sebanyak 3 orang petugas rekam medis dan sampel dalam penelitian ini adalah petugas rekam medis dengan total populasi yaitu seluruh petugas rekam medis dengan jumlah 3 orang. Hasil penelitian ini berdasarkan perhitungan Jumlah Ketepatan sebesar 83% (83 data kematian), sedangkan ketidaktepatan sebanyak 17% (17 data kematian) dari 100 sampel yang diambil dalam penelitian. Masih ada ketidaktepatan akibatnya salah satu faktor-faktor yang mempengaruhi ketidaktepatan adalah tidak ada Standar Operasional Prosedur dan sosialisasi tentang cara penentuan kode penyebab dasar kematian dan penyediaan tabel Medical Mortality Data System (MMDS) untuk membantu dalam penetapan kode penyebab dasar kematian.

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**Simpulan**

Pelaksanaan penentuan kode diagnosis penyebab dasar kematian di RSUD M.Th Djaman Sanggau belum sesuai dengan prosedur yang ada didalam ICD-10 karena tidak ada proses reseleksi kode penyebab dasar kematian dengan presentasi ketepatan penentuan kode diagnosis penyebab dasar kematian di RSUD M.Th Djaman Sanggau yaitu 83% dan ketidaktepatan mencapai presentase 17%.

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## Lampiran 2. Screenshot Pencarian Literatur melalui Database

### Hasil pencarian database Google Scholar

The screenshot shows a Google Scholar search page with the following details:

- Search Query:** ketepatan and underlying cause of death or penyebab dasar kematian and sertifikat kematian or laporan kematian
- Results:** Sekitar 282 hasil (0,04 dtk)
- Filters:**
  - Kapan saja: Sejak 2023, Sejak 2022, Sejak 2019, Rentang khusus... (2018 - 2022)
  - Urutkan menurut relevansi, Urutkan menurut tanggal
  - Semua jenis: Artikel kajian
  - sertakan paten,  mencakup kutipan
  - Buat notifikasi
- Search Results:**
  - 1. Mungkin maksud Anda adalah:** ketepatan and underlying cause of death or penyebab **dasar** kematian and sertifikat kematian or laporan kematian
  - 2. Ketepatan Kodefikasi Sebab Dasar Kematian pada Sertifikat Kematian di Rumah Sakit Pusat Angkatan Darat Gatot Soebroto** [PDF] helvetia.ac.id  
RM Dwijayanti, L Indawati, DR Dewi... - Jurnal Rekam... 2022 - ejournal.helvetia.ac.id
  - 3. Analisis Ketepatan Kodefikasi Penyebab Dasar Kematian di Beberapa Fasilitas Kesehatan Rujukan Tingkat Lanjutan (FKRTL)** [PDF] stikeslandbouw.ac.id  
LM Akbar, DM Putra - Adm Heal Inf J, 2022 - ojs.stikeslandbouw.ac.id
  - 4. Tinjauan Ketepatan Pengodean Diagnosis Penyebab Dasar Kematian pada Pasien Diabetes Mellitus di RSUD UJKI Jakarta** [PDF] publikasiindonesia.id  
D Nurmalasari, L Widia... - Cerdika: Jurnal... 2022 - cerdika.publikasiindonesia.id
  - 5. Systematic Review Keakuratan Underlying Cause of Death (UCOD) pada** [PDF] esaunggul.ac.id

Pencarian jurnal pada *Google Scholar* dengan kata kunci “Ketepatan and *Underlying Cause Of Death* or Penyebab Dasar Kematian and Sertifikat Kematian or Laporan Kematian.

### Hasil pencarian database *ScientDirect*

The screenshot shows a ScienceDirect search page with the following details:

- Search Query:** accuracy and underlying cause of death and death certification
- Results:** 1,351 results (sorted by relevance | date)
- Refine by:**
  - Years:
    - 2023 (62)
    - 2022 (340)
    - 2021 (288)
    - 2020 (260)
    - 2019 (220)
    - 2018 (244)
    - 2017 (208)
    - 2016 (182)
    - 2015 (196)
    - 2014 (181)
- Search Results:**
  - Research article** (Open access)  
**Underlying cause of death** identification from **death certificates** using reverse coding to text and a NLP based deep learning approach  
Informatics in Medicine Unlocked, 16 October 2020, ...  
Vincenzo Della Mea, Mihai Horia Popescu, Kevin Roitero  
[View PDF](#)
  - Short communication**  
**Decedents with interstitial lung diseases and the likelihood of death certificate** documentation  
Respiratory Medicine, 23 November 2022, ...  
Michelle Imperio, Sahil Batra, ... Niranjan Jeganathan

Pencarian jurnal pada *ScientDirect* dengan kata kunci “*Accuracy and Underlying Cause Of Death and Death Certificates*”

### Hasil pencarian *database PubMed*

The screenshot shows a web browser window displaying the PubMed website. The search bar contains the query "accuracy and underlying cause of death and death certification". The search results show 35 results, with the first result being "The impact of errors in medical certification on the accuracy of the underlying cause of death." by Gamage USH, et al. The page also features a "RESULTS BY YEAR" bar chart for the years 2018-2022 and a "TEXT AVAILABILITY" section with an "Abstract" checkbox.

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RESULTS BY YEAR

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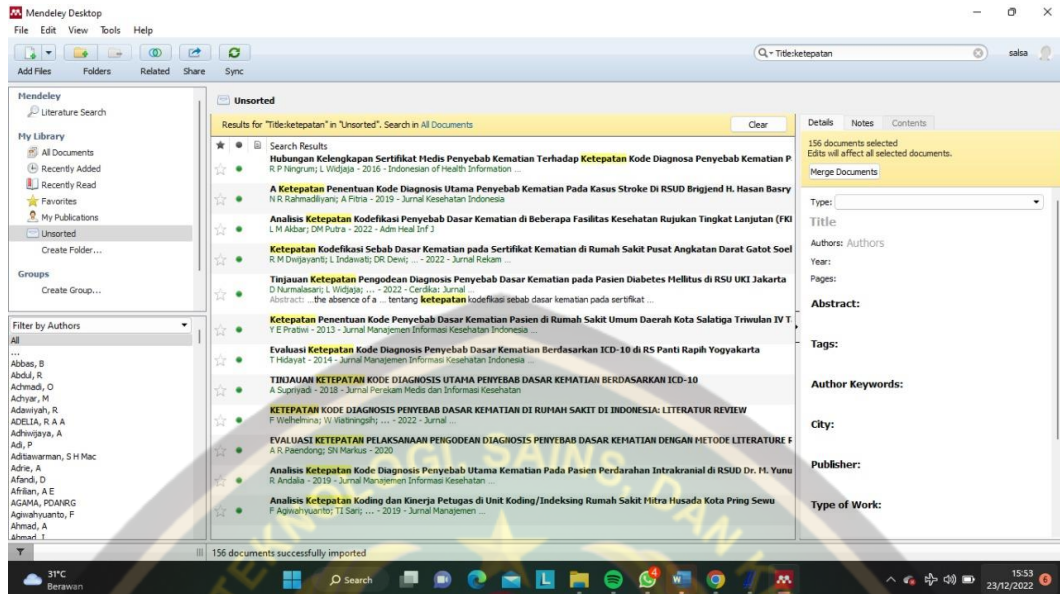
The impact of errors in medical certification on the accuracy of the underlying cause of death.  
Gamage USH, et al. PLoS One. 2021. PMID: 34748575 Free PMC article.

The impact of errors in medical certification on the accuracy of the underlying cause of death.

Cite  
Gamage USH, Adair T, Mikkelsen L, Mahesh PKB, Hart J, Chowdhury H, Li H, Joshi R, Senevirathna WMCK, Fernando HDNL, McLaughlin D, Lopez AD.  
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PLoS One. 2021 Nov 8;16(11):e0259667. doi: 10.1371/journal.pone.0259667. eCollection 2021.  
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Pencarian jurnal pada *PubMed* dengan kata kunci “*Accuracy and Underlying Cause Of Death and Death Certificates*”

## Contoh Jurnal Duplikat



## Lampiran 3. Screenshoot Halaman Pertama pada Jurnal Jurnal 1





## Jurnal 2

INFOKES, VOL 8 NO 2, September 2018

ISSN : 2086 - 2628

**TINJAUAN KEAKURATAN KODE SEBAB DASAR KEMATIAN PADA SERTIFIKAT KEMATIAN DI RSUP dr. SOERADJI TIRTONEGORO KLATEN**

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**Abstrak**

Keakuratan kode sebab dasar kematian digunakan sebagai pertimbangan dalam pengambilan keputusan di RSUP dr. Soeradji Tirtonegoro Klaten, tetapi belum melaksanakan penentuan kode sebab dasar kematian sesuai dengan ICD-10. Berdasarkan survei awal didapatkan hasil sertifikat kematian pasien 100% lengkap terisi. Sedangkan keakuratan penentuan kode sebab dasar kematian pada sertifikat kematian berdasarkan tabel MMDS di RSUP dr. Soeradji Tirtonegoro Klaten sebesar 90% tidak akurat dan 10% akurat. Penelitian ini bertujuan untuk mengetahui keakuratan kode sebab dasar kematian pada sertifikat kematian berdasarkan tabel MMDS di RSUP dr. Soeradji Tirtonegoro Klaten. Metode penelitian yang digunakan dalam penelitian ini adalah jenis penelitian deskriptif, dengan pendekatan retrospektif, pengumpulan data menggunakan observasi dan wawancara teknik sampling yaitu systematic random sampling. Hasil dari pembahasan menunjukkan belum terdapatnya prosedur penentuan pengisian diagnosis sebab kematian pada sertifikat kematian, belum terdapatnya prosedur pengkodean sebab dasar kematian, prosentase kelengkapan pengisian diagnosis 100% lengkap terisi, prosentase keakuratan kode sebab dasar kematian berdasarkan tabel MMDS 90,32% tidak akurat. Prosentase ketidakakuratan tertinggi yaitu 67,86% disebabkan kesalahan menentukan kode berdasarkan prinsip umum. Faktor yang mempengaruhi ketidaklengkapan pengisian diagnosis sebab kematian yaitu tidak adanya SPO pengisian diagnosis dan urutan penulisan yang belum sesuai ICD-10 oleh dokter. Faktor yang menyebabkan ketidakakuratan kode diagnosis yaitu tidak adanya SPO, penulisan diagnosis dan pengkodean yang belum sesuai aturan ICD-10, dan audit coding. Kesimpulan ketidakakuratan kode lebih tinggi dari kode yang akurat. Saran sebaiknya dibuat SPO pengisian diagnosis sebab kematian bagi dokter, SPO pengkodean sebab dasar kematian bagi staff coder, pelatihan pengkodean sebab dasar kematian, penyediaan MMDS bagi staff coder, dan dilaksanakan kegiatan audit coding.

**Kata Kunci:** Kelengkapan, Keakuratan, Kode Sebab Dasar Kematian, ICD 10.

## Jurnal 3

TELKOMNIKA

JURNAL ILMIAH PEREKAM DAN INFORMASI KESEHATAN IMELDA  
Vol.7 No.2, Agustus 2022, pp. 126-133  
ISSN: 2597-7156 (Online), 2502-7786 (Print)  
<http://jurnal.telkomnika.ac.id/index.php/JPIPKI>

**Asesmen Kode Penyebab Kematian Di RSUD Panembahan Senopati Bantul Yogyakarta**

**Suryo Nugroho Markus<sup>1</sup>, Laili Rahmatul Ilimi<sup>2</sup>, Praptana<sup>3</sup>, Sis Wuryanto<sup>4</sup>, Heri Herawan<sup>5</sup>, Sujono Riyadi<sup>6</sup>, Tri Sunarshih<sup>7</sup>**

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<sup>6</sup> Prodi Keperawatan, Universitas Jenderal Achmad Yani Yogyakarta, Indonesia  
<sup>7</sup> Prodi D3 Kebidanan, Universitas Jenderal Achmad Yani Yogyakarta, Indonesia

**Article Info**

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ISC-10  
Complete Coding  
Mortality

**ABSTRACT**

A complete medical record reflects the quality of good documentation, the complete of diagnosis writing reduces incorrect and inaccurate code and appropriate reporting to support decision makers. This study aims to measure the completeness and accuracy of the death code and the basic cause of death of patients. This study uses a quantitative descriptive design using a completeness checklist instrument. Researchers used secondary data from the medical records of patients who died in 2021, the total sample was 199 using the slovin formula. Secondary data analyzed with STATA, presented with tabulations and descriptive narratives. The basic cause of the basic cause of death was highest in code J80 at 33 (17%), J12.8 at 21 (11%) and the third being E11.9. Based on the category of completeness of filling out of the 199 medical records analyzed, there were 37% (75) death forms that were not filled in completely.

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## Jurnal 4

keakuratan UCOD pak J.pdf 1 / 9 100%

Indonesian of Health Information Management Journal (INOHIM)  
Vol.10, No.1, Juni 2022, p.57-65, DOI: 10.47007/inohim.v10i1.414 ISSN (Print) : 2354-8932  
ISSN (Online) : 2655-9129

**Systematic Review Keakuratan *Underlying Cause of Death* (UCOD) pada Sertifikat Kematian di Fasilitas Pelayanan Kesehatan**

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Submitted: 17 Juni 2022, Revised: 27 Juni 2022, Accepted: 29 Juni 2022

**Abstract**  
Death certificates are an important source of mortality and statistical data, affecting the quality of service. Therefore, it must be as accurate as possible to reflect the quality of existing health services. This study aims to analyze the accuracy of death certificates in health care facilities using five years of research data from journals published in the 2017-2020 range. This study accumulates and integrates existing studies of 15 articles as a sample. The results showed that the number of inaccurate death certificates in health care facilities was 49.82%, while the accurate data on death certificates was 50.18%. Accuracy data include, completeness, legibility, and accuracy in determining the Underlying Cause of Death (UCOD). This shows the low accuracy of data on the causes of patient death and affects mortality statistics in health care facilities. Therefore, training and assistance for coding and determining UCOD on death certificates should be sought at every health care facility, and further research to improve the accuracy of UCOD on death certificates.

**Keyword:** death certificate, healthcare facilities, UCOD

**Abstrak**  
Sertifikat kematian merupakan sumber data penting tentang kematian dan data statistik, hal ini berpengaruh dengan mutu pelayanan. Oleh karena itu harus seakurat mungkin sehingga mencerminkan mutu pelayanan kesehatan yang ada. Penelitian ini bertujuan untuk menganalisis keakuratan sertifikat kematian di fasilitas pelayanan kesehatan dengan menggunakan 5 tahun data penelitian dari jurnal yang dipublikasi dengan rentang tahun 2017-2020. Penelitian ini mengakumulasi dan mengintegrasikan studi yang telah ada terhadap 15 artikel sebagai sampel. Hasil

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1/12/2023

## Jurnal 5

Jurnal Riset Kesehatan 1 / 5 100%

Jurnal Riset Kesehatan, 6 (1), 2017, 45-49

**Jurnal Riset Kesehatan**  
<http://ejournal.pothickaswag.ac.id/ij/index.php/jrk>

**KEAKURATAN PENENTUAN KODE UNDERLYING CAUSE OF DEATH BERDASARKAN MEDICAL MORTALITY DATA SYSTEM DI RSUD KOTA SALATIGA TAHUN 2016**

Linda Widyaningrum\*); Tyas Kuntari  
Apikes Citra Medika Surakarta  
Jalan KH Samanludi No 93 Sondakan Laweyan ; Surakarta

**Abstrak**  
*Underlying Cause of Death* merupakan sebab-sebab kematian sebagai semua penyakit, keadaan sakit atau cedera yang menyebabkan atau berperan terhadap terjadinya kematian kalau tidak diterima pasien maka tidak akan meninggal. Tujuan penelitian untuk mengetahui keakuratan *Underlying Cause Of Death* berdasarkan *medical mortality data system* (MMDS) di RSUD Kota Salatiga tahun 2016. Penelitian ini menggunakan jenis penelitian non eksperimen, pengambilan data dengan metode observasi dan wawancara dengan pendekatan *retrospektif*. Populasi penelitian adalah 628 dokumen rekam medis pasien meninggal pada tahun 2016. Jumlah sampel sebanyak 87 dokumen yang diambil dengan teknik *random sampling*. Instrumen penelitian berupa pedoman wawancara, pedoman observasi, tabel MMDS, ICD-10, dan *check list*. Presentase keakuratan kode *underlying cause of death* di RSUD Kota Salatiga tahun 2016 menunjukkan keakuratan kode sebesar 27.59% akurat dan 72.41% tidak akurat. Ketidakeakuratan dibagi menjadi 3 yakni: (1) Sertifikat tidak diisi dan dikode sebesar 47.62%, (2) Salah penentuan UCoD berdasarkan prinsip umum sebesar 47.62%, (3) Salah penentuan UCoD berdasarkan rule 1 sebesar 4.76%. Sebaiknya mengkode semua diagnosis yang ada disertifikat kematian dan menggunakan aturan mortalitas baik Prinsip Umum, Rule 1, 2 maupun 3 serta merujuk ke tabel MMDS supaya memberikan kode yang akurat.

**Kata Kunci :** *Underlying Cause of Death*; Sertifikat kematian; Tabel MMDS

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## Jurnal 6

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### Using National Inpatient Death Rates as a Benchmark to Identify Hospitals with Inaccurate Cause of Death Reporting — Missouri, 2009–2012

Jennifer Lloyd, MSPH<sup>1</sup>; Ehsan Jahanpour, MS<sup>2</sup>; Brian Angell<sup>1</sup>; Craig Wood, MSW<sup>1</sup>; Andy Hunter, MA<sup>1</sup>; Cheri Bayinger, MS<sup>1</sup>; George Tuttlechillie, MD, PhD<sup>3</sup>

Reporting causes of death accurately is essential to public health and hospital-based programs; however, some U.S. studies have identified substantial inaccuracies in cause of death reporting. Using CDC's national inpatient hospital death rates as a benchmark, the Missouri Department of Health and Senior Services (DHSS) analyzed inpatient death rates reported by hospitals with high inpatient death rates in St. Louis and Kansas City metro areas. Among the selected hospitals with high inpatient death rates, 45.8% of death certificates indicated an underlying cause of death that was inconsistent with CDC's Guidelines for Death Certificate completion. Selected hospitals with high inpatient death rates were more likely to overreport heart disease and renal disease, and underreport cancer as an underlying cause of death. Based on these findings, the Missouri DHSS initiated a new web-based training module for death certificate completion based on the CDC guidelines in an effort to improve accuracy in cause of death reporting. Among all nonfederal, noninstitutional, short-stay hospitals or general hospitals in Missouri that each reported  $\geq 20$  deaths per year, 32 were purposively selected for the study. All selected hospitals were in the Kansas City metro area (15) or the St. Louis metro area (17). Combined, these hospitals reported half (50.7%) of all deaths in the state. Heart disease, cancer, and renal disease were selected from among the 10 top causes of death in the state, because death certificate–based reported deaths resulting from these conditions were substantially higher in Missouri than in the rest of the United States.

to detect multiple outliers in a univariate, approximately normally distributed data set (two-sided test,  $\alpha = 0.1$ ) was applied to the calculated inpatient hospital death rates data set. Hospitals with high outlying death rates in any of the three disease categories were selected. The rest of the normalized data set was then tested for normality again with the Shapiro-Wilk test (Figure). After calculating the standard deviation (SD) of the normalized data set, the inpatient death data were plotted around the U.S. benchmark, and a tolerance zone (benchmark  $\pm 2$  SD) was created. CDC's estimates of the U.S. 2010 inpatient hospital death rates for cancer, heart disease, and renal disease were used as benchmarks (7). Among hospitals with inpatient death rates  $\geq 2$  SD above the U.S. benchmark in any disease category, a sample of the hospitals that contributed the most deaths were selected. These hospitals, as well as the hospitals identified as outliers, were included in the analysis (Figure).

Medical charts for review were randomly selected from a data set that included all death certificates submitted by the hospital during 2009–2012 for the three disease categories. Sample sizes for the chart review were calculated to detect at least a 20% death certificate completion error rate, and ranged from 18 to 33 per hospital. Medical chart reviews were conducted by one physician and one epidemiologist who were trained in death certificate completion according to CDC guidelines (2). Death certificates were not available to the reviewers at the time of chart reviews. After a thorough review of medical charts with

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1/12/2023

## Jurnal 7

shanghai.pdf 1 / 12 100%

### BMJ Open Are cause of death data for Shanghai fit for purpose? A retrospective study of medical records

Lei Chen,<sup>1</sup> Tian Xia,<sup>2</sup> Zheng-An Yuan,<sup>3</sup> Rasika Rampatige,<sup>4</sup> Jun Chen,<sup>5</sup> Hang Li,<sup>4</sup> Timothy Adair,<sup>6</sup> Hui-Ting Yu,<sup>6</sup> Martin Bratschi,<sup>7</sup> Philip Setel,<sup>7</sup> Megha Rajasekhar,<sup>8</sup> H R Chowdhury,<sup>8</sup> Saman Hattotuwa Gamage,<sup>6</sup> Bo Fang,<sup>6</sup> Omair Azam,<sup>9</sup> Romain Santon,<sup>9</sup> Zhen Gu,<sup>7</sup> Ziwen Tan,<sup>1</sup> Chunfang Wang,<sup>1</sup> Alan D Lopez,<sup>9</sup> Fan Wu<sup>9</sup>

**To cite:** Chen L, Xia T, Yuan Z-A, et al. Are cause of death data for Shanghai fit for purpose? A retrospective study of medical records. *BMJ Open* 2022;12:e008195. doi:10.1136/bmjopen-2020-046195

Prepublication history and additional supplemental material for this paper are available online. To view these files, please visit the journal online (<http://dx.doi.org/10.1136/bmjopen-2020-046195>).

LC, TX, Z-A and RW are joint first authors. CW, ADL and FW are joint senior authors.

Received 02 December 2020  
Accepted 18 August 2022

**ABSTRACT**  
**Objectives** To assess the quality of cause of death reporting in Shanghai for both hospital and home deaths.  
**Design and setting** Medical records review (MRR) to independently establish a reference data set against which to compare original and adjusted diagnoses from a sample of three tertiary hospitals, one secondary level hospital and nine community health centres in Shanghai.  
**Participants** 1757 medical records (81% males, 39% females) of deaths that occurred in these sample sites in 2017 were reviewed using established diagnostic standards.  
**Interventions** None.  
**Primary outcome** Original underlying cause of death (UCOD) from medical facilities.  
**Secondary outcome** Routine UCOD assigned from the Shanghai Civil Registration and Vital Statistics (CRVS) system and MRR UCODs from MRR.  
**Results** The original UCODs as assigned by doctors in the study facilities were of relatively low quality, reduced

**Strengths and limitations of this study**

- Assessment of diagnostic accuracy at the individual level for over 1700 deaths.
- Established ex-ante diagnostic criteria used to develop reference diagnoses for assessing data quality, thus reducing subjectivity in choice of reference diagnoses.
- Medical history documentation for the top 25 cause of deaths was reviewed by one trained doctor, thus increasing risk of potential diagnostic bias for reference diagnoses.

which although experiencing a relatively low mortality rate and high life expectancy (80.2 years),<sup>1</sup> faces a number of health-related challenges stemming from an ageing population,

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1/12/2023

## Jurnal 8

Washirasakiri et al. BMC Health Services Research (2018) 18:478  
https://doi.org/10.1186/s12913-018-3289-1

BMC Health Services Research

RESEARCH ARTICLE Open Access

## Accuracy and the factors influencing the accuracy of death certificates completed by first-year general practitioners in Thailand

Chaiwat Washirasakiri<sup>1</sup>, Prateep Raksasagulwong<sup>2</sup>, Charoen Chouriyagune<sup>1</sup>, Pochamana Phisalprapa<sup>1</sup> and Weerachai Srivanichakom<sup>1\*</sup>

**Abstract**

**Background:** Although death certificates (DCs) provide valuable health information which may help to guide local health policies and priorities, there is little information concerning their validity in Thailand. First-year general practitioners (GPs) have a major role in DC completion, especially in provincial general hospitals. The aim of this study was to evaluate the accuracy and factors influencing the accuracy of DCs completed by first-year GPs in Thailand, compared with the cause of death (COD) derived from medical records by experts.

**Methods:** This retrospective study was conducted at 14 provincial general hospitals in Thailand during the June 2011 to May 2012 study period. Medical records and DCs completed by first-year GPs who graduated from 16 Thai medical schools were sampled. The cause of death recorded on the DCs was compared with the medical conditions and histories derived from patient medical records. A cross-sectional survey of the 210 GPs who completed the DCs reviewed in this study was also conducted. Respondent GPs' demographic characteristics, factors associated with COD, and COD coding system were evaluated.

**Results:** Five hundred and sixty-three medical records and corresponding DCs were included. Of those, 36.9% of DCs were found to be correct. Common mistakes included incorrect sequence of events leading to death (32.4%), and mode of death use (26.2%). Of the 210 GPs, 155 questionnaires were completed and returned. The mean time spent on recording COD and completing DCs in the medical school curriculums was 21 ± 0.9 h and only 27.7% of participants had experience in completing DCs by themselves during medical school. Mean medical school GPA

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## Jurnal 9

J Epidemiol 2016;26(4):191-198  
doi:10.2188/jea.JE20150010

Original Article

## Accuracy of Death Certificates and Assessment of Factors for Misclassification of Underlying Cause of Death

Makiko Naka Mieno<sup>1\*</sup>, Noriko Tanaka<sup>2\*</sup>, Tomio Arai<sup>3</sup>, Takuya Kawahara<sup>4</sup>, Aya Kuchiba<sup>5</sup>, Shizukiyo Ishikawa<sup>6</sup>, and Motoji Sawabe<sup>7</sup>

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<sup>7</sup>Section of Molecular Pathology, Graduate School of Health Care Sciences, Tokyo Medical and Dental University, Tokyo, Japan

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**ABSTRACT**

**Background:** Cause of death (COD) information taken from death certificates is often inaccurate and incomplete. However, the accuracy of Underlying CODs (UCODs) recorded on death certificates has not been comprehensively described when multiple diseases are present.

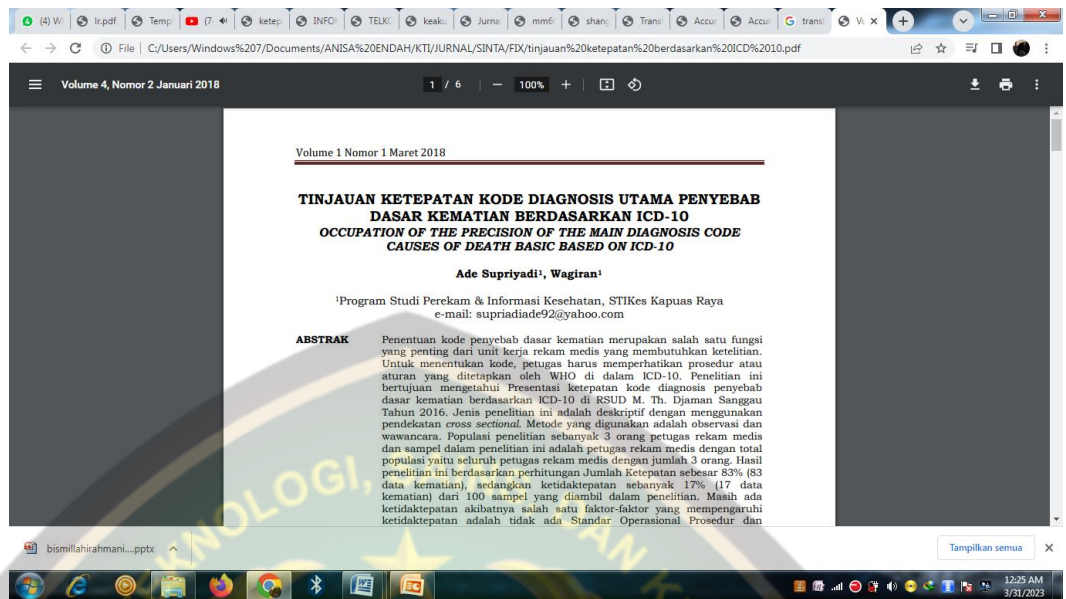
**Methods:** A total of 450 consecutive autopsies performed at a geriatric hospital in Japan between February 2000 and August 2002 were studied. We evaluated the concordance rate, sensitivity, and specificity of major UCODs (cancer, heart disease, and pneumonia) reported on death certificates compared with a reference standard of pathologist assessment based on autopsy data and clinical records. Logistic regression analysis was performed to assess the effect of sex, age, comorbidity, and UCODs on misclassification.

**Results:** The concordance rate was relatively high for cancer (81%) but low for heart disease (55%) and pneumonia (9%). The overall concordance rate was 48%. Sex and comorbidity did not affect UCOD misclassification rates.

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## Jurnal 10



## Lampiran 4. Pendokumentasian

