Received:1October2020-Revised:9December2020-Accepted:12December2020DOI:10.1002/bsl.2505SPECIALISSUEARTICLERevengefilicide:Aninternationalperspectivethrough62casesWadeC.Myers1|EricaLee1|RoseMontplaisir1|EmilyLazarou2|MarkSafarik3|HengChoon(Oliver)Chan4|EricBeauregard51DepartmentofPsychiatryandHumanBehavior,theWarrenAlpertMedicalSchoolofBrownUniversity,Providence,RhodeIsland,USA2LaCoopP.A.,Odessa,Florida,USA3ForensicBehavioralServices,Inc.,Fredericksburg,Virginia,USA4DepartmentofSocialandBehaviouralSciences,CityUniversityofHongKong,KowloonTong,HongKong5SchoolofCriminology,SimonFraserUniversity,Burnaby,CanadaCorrespondenceWadeC.Myers,DepartmentofPsychiatryandHumanBehaviorAlpertMedicalSchoolofBrownUniversityChief,ForensicPsychiatryDivisionCoroWest,Suite204OneHoppinStreetProvidence,RI02903,USA.Email:wmyers@lifespan.org

Abstract

Filicide is the purpose of killing of one or more children by a parent,step‐parent,or other parental figure.

Revengefiliideisapoorlyunderstood,rareformoffilicideinwhichaparentmurderstheirchildtocauseemotionalharmto the child's other parent.

Thisdescriptivestudypresentsanin-ternationalcaseseriesconsistingof62revengefilicidecasesfromninecountries.Perpetratorswereaboutequallylikelytobemaleorfemale.Overhalfofthesamplehadanactivementaldisorderofanytype,mostoftenapersonalitydisorder.Ahistoryofdomesticviolencewascommon.The mean victim age was 6 years.Theyweretypicallykilledbyasphyxiation,firearms,orknives,andpreschoolagechil-drenweretargetedmostfrequently.Inhalfofthecases,morethanonechildwasmurdered.Post‐crimesuicidalbehaviorwascommonplace,andone‐thirdofthesamplediedbysuicide.

Four revenge filicide sub-types were identified:

1. rejection,
2. custody/visitation dispute,
3. infidelity/jealousy,and
4. argument/conflict.

These categories may prove useful in future research hand for helping to identify children at high risk of becoming filicide victims. All surviving offenders were criminally convicted, and in only one case was a mental health defense successful in lessening culpability. Notable similarities and differences between the US and international cases are discussed

AbstractFilicideisthepurposefulkillingofoneormorechildrenbyaparent,step‐parent,orotherparentalfigure.Revengefili-cideisapoorlyunderstood,rareformoffilicideinwhichaparentmurderstheirchildtocauseemotionalharmtothechild'sotherparent.Thisdescriptivestudypresentsanin-ternationalcaseseriesconsistingof62revengefilicidecasesfromninecountries.Perpetratorswereaboutequallylikelytobemaleorfemale.Overhalfofthesamplehadanactivementaldisorderofanytype,mostoftenapersonalitydisorder.Ahistoryofdomesticviolencewascommon.Themeanvictimagewas6years.Theyweretypicallykilledbyasphyxiation,firearms,orknives,andpreschoolagechil-drenweretargetedmostfrequently.Inhalfofthecases,morethanonechildwasmurdered.Post‐crimesuicidalbehaviorwascommonplace,andone‐thirdofthesamplediedbysuicide.Fourrevengefilicidesubtypeswereiden-tified:rejection,custody/visitationdispute,infidelity/jeal-ousy,andargument/conflict.Thesecategoriesmayproveusefulinfutureresearchandforhelpingtoidentifychil-drenathighriskofbecomingfilicidevictims.Allsurvivingoffenderswerecriminallyconvicted,andinonlyonecasewasamentalhealthdefensesuccessfulinlesseningculpability.NotablesimilaritiesanddifferencesbetweentheUSandinternationalcasesarediscussed.BehavSciLaw.2021;39:205–215.wileyonlinelibrary.com/journal/bsl©2021JohnWiley&SonsLtd.-205

1|INTRODUCTIONFilicideisbroadlydefinedasthepurposefulkillingofone'schildofanyage.Perpetratorsmayincludebiologicalparents,step‐parents,adoptiveparents,orotherestablishedparentalfigures.Althoughconsideredtaboobymostofhumancivilization,filicidehasbeenrecognizedaspartofthehumanconditionforthousandsofyears.None-theless,apaucityofscientificstudiesalongwithmethodologicalandethicalobstacleshaveledtoalimitedun-derstandingofthisparadoxicalparentalbehavior(Friedman,Horwitz,&Resnick,2005;Harris,Hilton,Rice,&Eke,2007).Additionally,thereislimitedresearchexaminingmotivationalandotherdynamicsinfilicidecasesusingclearlydefinedinclusioncriteria(Bourget,Grace,&Whitehurst,2007).Howparentscancircumventinstinctual“hardwiring”toprotectandnurturetheiroffspring,andinsteadchoosetomurderthem,remainsenigmatic.InthefirstcomprehensivestatisticalanalysisoffilicideintheUnitedStates,drawingfrom32yearsofdataonnearly16,000arrests,itwasfoundthatfilicidecomprises2.5%ofallhomicides(Mariano,Chan,&Myers,2014a,2014b).Themeanoffenderagewas32,andthree‐quartersofoffenderswereaged18–40years.One‐thirdofvictimswereunder1yearold,andovertwo‐thirdsofvictimswereaged6yearsorless.Themostcommonfilicidaleventwasfatherskillingsons(30%ofcases),followedbymotherskillingsons(22%),motherskillingdaughters(20%)andfatherskillingdaughters(18%).Personalweapons–e.g.,hands,feet–werethemostcommonlyreportedweapontype(one‐halfofcases),followedbyfirearms(one‐quarterofcases).Unexpectedly,thisresearchshowedthatmenareaboutaslikelyaswomentokillinfants;stepchildrenarenotmorelikelythanbiologicalchildrentodieatthehandsofaparent;andnearlyoneinfivefilicidevictims(18%)areadultchildren.Filicideisnotjustariskforminorchildren.

AnAustraliannationalstudy(Brownetal.,2019)examined238filicidesbetween2000and2012,andtheirfindingsweresimilarinanumberofwaystotheUSstudycited.Theauthorsreportedthatfilicideaccountedfor7%ofallhomicideincidents,andthemedianoffenderagewas32years.Asimilarportionoffathersandmothersoffended.Mostvictimswereunder5yearsofage,butonly4%oftheirvictimsamplewereadults.Causeofdeathwasbroadinscope:beating(24%),strangulation/suffocation(14%),stabwound(12%),drowning/submersion(10%),poisoning/injection(8%),shakenbabysyndrome(8%),andgunshotwound(6%).

Turningtomotive,ahandfulofrepeatingoffenderreasonsforcommittingfilicidehavebeenportrayedinmythology,history,religion,literature,and,morerecently,scientificliterature(e.g.,seeBrownetal.,2019;Coorg,R.,&Tournay,A.2012;Hatters‐Friedman,Horwitz,&Resnick,2005;Hatters‐Friedman&Resnick,2011;Kauppi,Kumpulainen,Karkola,Vanamo,&Merikanto,2010;Palermoetal.,1997;Resnick,1969;Sakuta&Saito,1981;West,2007).Thesemotivesincludekillingchildren:(1)whoareunwantedorillegitimate;(2)unintentionallyduringchildabuse;(3)foraltruisticreasonsormercy(e.g.,childrenwithdisabilities);(4)duetomentalillness(e.g.,de-lusions);(5)whileintoxicated;(6)forrevenge;(7)topreventchildtestimonyagainsttheparent;(8)forfinancialgain(e.g.,toevadechildsupportobligations);(9)inaccordancewithreligiousorculturalbeliefs(e.g.,toremedyfamilydishonorbroughtaboutbyachild'sunacceptablebehavior);(10)forsexualgratification;and(11)forsympathyorattention(e.g.,factitiousdisorderbyproxy,formerlyMunchausensyndromebyproxy).Itshouldbenotedthatmorethanonemotivationmaydrivethecommissionofaparticularfilicide(Declercq,Meganck,&Audenaert,2017).Neurobiological,hormonal,andevolutionaryunderpinningshavealsobeenreportedascontributoryfactorsinfilicide(Darwin,1871;Mariano,Chan,&Myers,2014a,2014b).Revengefilicide,believedtobeanuncommontypeoffilicide,isevenlessunderstoodthanothertypes.Itoccurswhenaparentmurdersoneormoreoftheirchildrentocauseemotionalpainandsufferinginthechild'sotherparent,usuallytheircurrentorformerrelationshippartner.Resnick(1969),basedonhisliteraturereviewover50yearsago,foundthat4%offilicidesweremotivatedbyrevenge.Brownetal.'s(2019)

Australianfilicidestudydiscovered that 9% were predicated on“revenge/jealousy.”

Toputthisinperspective,theFederalBureauofInvestigationestimatedtherewere16,425USmurdersin2019.If2.5%ofthesekillingswerefilicides,andapproximately5%(4%–9%)ofthesefilicidesweremotivatedbyrevenge,thenwecanestimatethatabout21revengefilicidesoccurredin2019,whichaccountsforroughlyonein800homicides(0.125%ofallmurders).206-MYERSETAL.

Theserevengefilicidesweretypicallyundertakeninresponsetofeelingsofanger,hurt,rejection,beingdevalued,and/orbeingthreatenedwithlossofaccesstotheirchildren.Theoffenderspresumablybelievedthatengaginginfilicidewouldhelptorestoretheirsenseofintegrity,self‐esteem,and/orhonor.Relationshipdiffi-culties,includingseparation/divorceandactualorperceivedinfidelity,arecommonpredisposingfactorsfortheoutrageandfurythatleadtoadesireforrevenge(e.g.,Wilczynski,1995).Threatofseparationfromapartnerorone'schildrencanbeofparticularimportanceinrevengefilicidecases.Thespecterofabandonmentcanstirupintolerablefearsofloneliness,emptiness,lossofidentity,andforfeitureofsocialstatus.Otherlifestressors,suchasfinancialdifficulties,lowsocioeconomicstatus,andunemployment,maybeexacerbatingfactors.Carruthers(2016)positedthatthereisapathologicaldeficiencyintheseperpetrators'capacityforempathyorperceptionofan-other'spersonhood,andthustheyperceivetheirchildasmerelyanobject.Therearefrequentreferencestorevengeasafilicidalmotiveinmythologyandotherhistoricalsources,andthesekillingshavebeenreferredtoas“Medeacomplex”murders.ThistermoriginatedfromtheancientGreektragedyMedeabyEuripides(firstperformedin431BC).MedeamurderedtwoofherchildreninanactofretaliationagainstherhusbandJasonwho,afterreceivingMedea'shelpinobtainingtheGoldenFleece,abandonedherinordertomarryGlauce,KingCreon'sdaughter.Ovid'sMetamorphoses(firstpublishedin8AD)isanotherdepictionfromantiquityofarevengefilicide:thestoryofProcneandPhilomena.ProcneboiledhersonItysandfedhimtoherhusbandTereus,thekingofThrace,uponlearningthatTereushadrapedhersisterPhilomenaandcutouthertonguesoshecouldnottellwhathappened.Althoughunabletospeak,PhilomenaweavedatapestrytoconveyherstoryofsexualassaulttoProcne.AnunusualtwisttorevengefilicideisfoundinPseudo‐Apollodorus’accountfromhisBibliotheca(aroundthefirstorsecondcenturyAD)ofHeracles'murderousbehaviortowardhisfamily,a“revengefilicidebyproxy”ofsorts.Heracles'stepmotherHeradespisedhimbecausehewastheillegitimatesonofherhusbandZeus.TopunishZeusforhisinfidelity,HeracausedHeraclestobestruckbymadnessandledhimtounknowinglykillhisthreesonsbecausehewasdeludedintobelievingtheywerethechildrenofhisenemy.Afinalhistoricalexample,fromthe19thcentury,isaGermanfairytalecollectedbytheBrothersGrimm,TheJuniperTree.Inthisstory,theevilstepmotherresentsherstepsonanddecapitateshimwiththelidofachestwhenhereachesinsideitforanapple.Thestepmotherthenputshisbodyinachair,repositionsthehead,andtellsherdaughtertohithimonthesideoftheheadwhenhewillnotrespondtoherrequesttohavetheappleinhislap.Afterward,thestepmothermadebloodpuddingoutoftheboyandfedittohisfather.Theseekingofvengeanceagainstone'scurrentorformerspouseorpartnerthroughfilicidehasbeenreportedinvariouscountriesaroundtheworld.Forexample,fromtheirstudyofstudiedChinesehomicide‐suicides,Densley,Hilal,Li,&Tang(2017)reportedacaseinwhichYunFangpoisonedher4‐year‐oldsonandstabbedtodeathhermarriedloverMrLiu.Fiveyearsearlier,MsFangunderwentadivorceafterherhusbandcaughtherhavinganaffairwithMrLiu.ShethenhadachildbyMrLiu,butMrLiuwasreluctanttoleavehiswifeforMsFang.Sheavengedhisrejectionofherbykillinghimandtheirson.Afterward,shekilledherselfbytakingpoison.Inanothercasefromthisresearch,a35‐year‐oldwomanhadanargumentwithherhusbandandheleftthehome.Apparentlyinretaliation,shecutthethroatsofher2‐and4‐year‐olddaughterswhiletheywereinbedandpoisonedher8‐and10‐year‐olddaughterswithpesticide.Shealsoingestedthepesticideandendedupdyingfromit,whereashertwooldergirlssurvived.Insomecases,therevengefilicidemaybeaimedatpartiesotherthesecondparent.Forexample,in2007,47‐year‐oldpilotEricJohnsonputhisCessna150intoasteepdiveandcrashedintohisex‐mother‐in‐law'shouse,killinghimselfandhis8‐year‐olddaughterwhohadaccompaniedhimontheflight(Davies,2007).Shortlybeforetheincidenthehadcalledhisex‐wifeandsaid,“Ihavegother,andyouarenotgoingtogether.”Thefatherandmotherwereinacustodydisputeatthetime.Thathechosetocrashintohismother‐in‐law'shomesuggestshealsoharboredtheneedforretaliationagainstthechild'sgrandmother.Tohelpaddresstheextantknowledgegaponrevengefilicide,weconductedthisexploratory,descriptivestudyconsistingof62casesfromninecountries,thusalsoallowingforaninternationalperspective.ToourMYERSETAL.-207

understanding,thisisthefirstsystematicstudyfocusingspecificallyonrevengefilicide.Wehavedirectedourresearcheffortsinthisexploratorystudyprimarilyonoffenderandvictimcharacteristics,offenderpsychopa-thology,domesticviolencehistory,basisforrevenge,killingmethod,post‐crimeactions,andjudicialoutcomes.2|METHOD2.1|SampleThesampleconsistedof62casesofrevengefilicidefromninecountriescompiledfromtheauthors'forensicpsychiatrypractices(N=10;16%)andpublicrecordcases(N=52;84%).Thelatteronlyincludedcasesthathaddetailed,reliabledata–e.g.,lawenforcementrecords,courtdocuments,trialtranscripts,sentencinginformation,reliablenewssources–andinwhichtherewasclearevidenceofrevengeastheprimarymotivationfortheho-micidalbehavior.Akeywordblockwasused(i.e.,revenge+filicide;childmurder+parent)intheonlinesearchesforrevengefilicidecases.Thepotentialcasesidentifiedwereexaminedtodetermineiftheywerecredibleandverifiable.Toensurethattheoffenders'motivewasrevenge,officialrecords(e.g.,policeandinvestigationreports,offenderconfessions),offenderverbalorwrittencommunicationsbefore,duringand/orafterthecrimes,andwitnessstatements,etc.werereliedupon.Codingofthecasevariableswasperformedbythefirst,second,andthirdauthors,blindtoeachother'sratings.Thenthedataforeachcasewereverifiedbyanauthorindependentoftheinitialcodingprocess.Whenuncertaintyordisagreementaroseinacase,whichwasinfrequent(<10%ofcases),thenthosecaseswerediscussedamongstalltheauthorsuntilacommondecisionwasmade.Intotal,43cases(69%)werefromtheUS,five(8%)fromCanada,fivefromEngland(8%),four(6%)fromAustralia,two(3%)fromIndia,one(2%)fromHongKong,one(2%)fromScotland,andone(2%)fromaBritishOverseasTerritory.Thesehomicidesoccurredovera20‐yearperiod,1999–2019.2.2|InclusionaryandexclusionarycriteriaNominimumtime‐framefortherevengemotivetohaveexistedwasrequiredforinclusion.Incertaincases,thedesireforrevengewasmorespontaneous,asduringaheatedargumentoruponlearningthataspouseorboyfriendwasendingtherelationship,whereasinothercasesthedifficultieshadbeenfesteringforalongtime,asinprotractedcustodyandvisitationlitigationthroughthefamilycourtsystemorongoinginfidelitybyapartner.Insomecases,therewerecoexistingmotivationsbesidesrevengeforthemurder(s)(e.g.,despondencyoverfinancialcollapsebroughtonbytheterminationofarelationship),andthesecaseswereincludedwhenthegoalofrevengewasthefundamentalimpetustothecrime.Further,wealsoincludedcasesinwhichrevengewasnottargetedsolelyattheotherparent,providedtheactoffilicidewascarriedoutinthepursuitofvengeancetowardaparentalfigure(e.g.,towardgrandparentswhohadgainedcustodyofachild).Therewerenootherparticularinclusionorexclusioncriteriainordertopromotetheacquisitionofamoreempirical,representativesample.Truetothisapproach,casesinwhichadult‐agedoffspringwerekilledbyaparenttoachievevengeanceagainsttheotherparentwerealsoincluded.3|RESULTS3.1|OffendercharacteristicsThemeanageofthe62offenderswas36.5years(range:20–58,SD=9.6);33(53%)weremale,29(47%)werefemale;39(63%)wereWhite,12(19%)wereBlack,seven(11%)wereHispanic,andfour(6%)wereAsian.As208-MYERSETAL.

regardseducationallevel,18(51%)offendershadsomedegreeofhighschooleducationorahighschooldiploma,12(34%)hadsomelevelofcollegeeducationoracollegedegree,andfive(14%)hadsomelevelofgraduateschooleducationoragraduatedegree.Thereweremissingorinconclusivedataoneducationallevelforanumberofcases.Ofoffenderswithknownemploymentstatus(n=59),only56%(33)wereemployedatthetimeofthehomicide.3.1.1|OffenderpsychiatricdisordersanddomesticviolencehistoryOverall,35(56%)hadanactivementaldisorderofanytype.Themostcommondiagnosiswasanypersonalitydisorderin21(34%)offenders,especiallyantisocialpersonalitydisorder,whichwaspresentinseven(33%)ofthosewithpersonalitydisorders.Thenextmostfrequentdiagnosiswasdepression,foundin13(21%)offenders;twoofthesecaseswerepostpartumdepressions.Thiswasfollowedbysix(10%)withanysubstanceusedisorder,two(3%)withanxietydisorders,andoneeachforschizoaffectivedisorder,delusionaldisorder(jealoustype),andbi-polardisorder.Theoneoffenderwithknownbipolardisorderwasseverelydepressedatthetimeofthekillings,andthuswascountedinthedepressiongroup.Diagnoseswerebasedonconditionsidentifiedbymedical,counseling,orotherrecords,oneormorementalhealthprofessionals,and/orsufficientdocumentationofDiagnosticandStatisticalManualofMentalDisorders,5theditiondiagnosticcriteria.Alldiagnosesmadewerereviewedandconfirmedbyatleastone(andinsomecasesboth)ofthetwopsychiatristauthors.Additionally,allcaseswerereviewedtodetermineiftheoffendershadahistoryofdomesticviolencetowardtheirpartner(s)predatingtheirfilicidalcrimes.Intotal,22(35%)oftheoffendershadadocumentedhistoryofphysicalviolencetowardtheirpartner;55%(18of33)ofmaleoffendersand14%(fourof29)offemaleoffenders.3.1.2|OffenderrelationshipstatusIn33(53%)cases,theparentswerestilllegallymarried,butwerehavingseriousmaritalstrife,wereestranged,and/orwereintheprocessofgettingadivorce.Infour(6%)cases,theparentswereinarelationshipbutnotmarried,andlikewisewerehavingseriousinterpersonalproblems.In12(19%)casestheparentshaddivorced,andin13(21%)casestheunmarriedparentshadendedtheirrelationship.Intwocases,therevengemotivewasnotdirectedatthechild'sotherbiologicalparentbutatgrandparentswhohadbeengrantedcustodyofthechildren.Inonecase,custodyofthechildhadbeenawardedtothematernalgrandmother,andthemotherkilledthechildtopunishhermother(thevictim'sgrandmother)fornotgivinghermoneyshefeltshewasowed.Inthesecondcase,thefatherwassuspectedofhavingkilledhiswifeduringacampingtrip,butherbodywasneverlocatedandtherewasnotenoughevidencefortheprosecutiontoproceed.Nevertheless,thematernalgrandparentswereawardedcustodyofthetwochildrenfollowingaheatedlegalbattlewiththefather.Subsequently,thefatherkilledthechildrentopunishthegrandparents.3.2|VictimsThemeanageofthe101childvictimswas6.1years(range0.25–24;SD=5.2);54(53%)weremaleand47(47%)werefemale.In50%ofthecases(31of62),onlyonechildwaskilled.Intheotherhalfofthecases,multiplechildrenwerekilled(range:2–4).Agecategoriesforthechildvictimswereasfollows:nine(9%)wereinfants(uptoage1year);14(14%)weretoddlers(>1to2years);35(35%)werepreschoolage(3–5yearsold);31(31%)werelatencyage(6–12years);ninie(9%)wereteenagers,13–17yearsold;andthree(3%)wereadults(≥18years).MYERSETAL.-209

3.3|KillingmethodAsphyxiationwasthemostcommonkillingmethod,responsibleforthevictims'deathsin22(35%)cases.Thisgenerallyinvolvedstrangling,smothering,drowning,orcarbonmonoxidepoisoning.Thesecondmostfrequentcaseofdeathwasbyfirearm,usedin17(27%)cases.Cuttinginstruments,usedin14(23%)cases,werethethirdmostcommonweaponchoice.Kniveswerealmostexclusivelyreliedupon,apartfromtwocasesinwhichhatchetswerethecauseofdeath.Throwingvictimsfrombridges(depontisation)wasthefourthmostlikelymethodofdeath,foundinthreecases(5%).Theremainingcausesofdeathwerethebashingofaninfantandtoddleragainstthewallandfloorintwocases,andonecaseeachofthrowingthevictimfromthewindowofamovingcar(“vehiculardefenestration”),immolation,poisoning,andthrowingthevictimoffacliff.Ofinterest,severaloffendersexhibitedbehaviorsthatmayreflectcompassionforthechild(ren)abouttobekilled.Forexample,infivecasesthechildrenhadbeendruggedwithmedications,typicallyprescriptionsedativeorotherpsychotropicmedications,beforetheywerekilledbyothermethods.Thisdruggingbehaviormayhavebeenanattempttolessenthesufferinginherentinbeingkilledbyone'sparent.Anotherexampleofthiswasseenwithseveralparentswhoshottheirchildreninthebackoftheheadsotheywouldnotbeawareoftheirfate.Similarly,onefathertookhischildrenintoacreekandexplainedhewasgoingtogivethem“swimminglessons,”andthenheinstructedthemtolookawaypriortoforcingtheirheadsunderwateranddrowningthem.3.4|BasisoftherevengemotiveThemostfrequentreasonforkillinginrevenge,foundin24cases(39%),wastheoffenderbeingabandonedorspurnedbyone'spartner,termed“rejection”type.Commonly,theunhappypartnerhaddeclaredheorshewantedadivorceortoendtherelationship.Insomecases,thedepartingpartnerhadendedtherelationshiptoescapedomesticviolence.Offenderssometimeshadmadeveiledordirectthreatsbeforehandtokillthepartnerand/ortheirchildiftheyweretoleavetherelationship.Alternatively,sometimesoffenderskilledtheirchildrenwithnoapparentwarningsigns,totheastonishmentofthosewhoknewhimorher.Thesecondmostcommonreasonforseekingrevenge,in20(32%)cases,wascontentionovercustodyandvisitationarrangements.Attimesthisinvolvedthefearorthreatofneverseeingtheirchildrenagain,whetherjustifiedornot,andofteninvolvedaheatedbattleinthefamilycourtsystem.Thiswasclearlyillustratedinonecasewhere,onlyhoursbeforethehomicide,theoffendercalledthesecretaryofhisfamilylawattorneyandtoldher,“IfIcan'thaveher[thechildvictim],noonewill.”Thistypewaslabeled“custody/visitationdispute.”In11(18%)cases,theoffendersoughtrevengeduetothebeliefthathisorherpartnerwasbeingunfaithful,orthattheircurrentorformerpartnerhadfoundanewpartnerandwasmovingoninlife.Someoffenders,eventhoughtheyweredivorcedornolongerintherelationship,couldnottoleratetheideaoftheirformerpartnerbeingwithsomeoneelse.Jealousywastheprimaryemotion,andthistypewascategorized“infidelity/jealousy.”Lastly,inseven(11%)cases,therevengekillingsweredrivenbyanintenseargumentorfromongoingconflict,andthisfinaltypewasdesignated“argument/conflict.”Examplesofthesourcesofdiscordinthesecasesincludedcontentionovermoney,notcarryingone'sweightintherelationship,andfeelingtrapped(Table1).3.5|MurderorinjuryofothersrelatedtothefilicidalactsTherewereonlytwocasesinwhichothersweremurderedbeyondthefilicide.Inonecase,theboyfriend,whileintoxicatedwithalcoholandcocaine,killedandmutilatedhisgirlfriend'stwochildren(hewastheirdefactostepfather)whiletheirmotherslept.Themotiveinthiscasewascategorizedasargument/conflicttypebecausehefelttrappedinanunhappyrelationship,hadalowfrustrationtoleranceforparentingstress,andbuckedatthe210-MYERSETAL.

conceptoffamilialresponsibility.Themotherawokeanddiscoveredwhathehaddone,sohebeatandknifedhertodeath.Inanothercase,amotherlocatedandkilledawomanwithwhomshebelievedherhusbandwashavinganaffair,nextshothertwoyoungchildreninthehead,andthencommittedsuicidebyshootingherselfinthehead.Intwoothercases,motherswereinjuredbutpurposelynotkilledbyfathers.Inonecase,thehusband,whowasupsethiswifewantedadivorce,shottheirtwinstodeath,shothiswifeinthelegsoshewouldlivebutsuffer,andthenturnedthegunonhimselfandcommittedsuicide.Intheothercase,thehusbandbecamedeeplyupsetwhenhiswifetoldhimshewantedadivorce.Inresponsehepunchedher,cutherAchillestendons,andtiedherupintheircarsoshecouldnotescapeandwouldbeforcedtowatchhisnextmoves.Hethenshottheirdaughterinthechest,setthehomeonfirewithhimselfandtheirdaughterinside,andcommittedsuicidebyshootinghimselfinthehead.3.6|Post‐crimesuicidalactionsInthepost‐crimeperiod,atotalof39(63%)perpetratorsengagedinsuicidalbehavior,and20ofthem(32%oftheentiresampleof62)successfullykilledthemselves.Thus,abouthalf(51%)ofthesesuicideattemptswerefatal.Menandwomenwereapproximatelyequallylikelytoattemptsuicide(66%ofwomenand61%ofmenintheentiresample).However,menwerefarmorelikelytocompletesuicide.Intotal,42%(n=14)ofmaleperpetratorswhoTABLE1Examplesofoffenderrevengemotivecommunicationstotheotherparent1.“Ihopethisteachesyouagoodlessonfortherestofyourlife....Itisyourfault!”2.“ItoldyouIwouldmakeyoupay,enjoyyourlifenow,nothingisstoppingyou,hahaha.Justrememberit'sallyourfault.”“DidyoureallythinkIwasgoingtodieandallowyoutobringup[ourson]andplayhappyfamilies...?”3.“I'velosteverybodyI'veloved.Nowit'stimeforyoutodothesame.”4.“IfIcan'thavethem,hecan'thavethemeither.”5.“IwantyoutoliveandsufferlikeIdid.”6.“Timetotakeawaythepain.Yougotwhatyouwanted,nowifeandnokids.”7.“Ihaveleftyouapresent–I'llmakethepapers,justyouwait.”“Whenyouarelayinginbedatnightrememberyoufuckingdidthistoyourself!”8.“Ihopethismakesyoufeel1/1000thofthepainIfeel.”9.“I'mgoingtohurtyou...I'mgoingtobreakyourheartinto50millionpieces...saygoodbyetoyourkids.”10.“DoIhaveyourattentionnow,bitch?Igotyourattentionnow,bitch.You'renevergoingtoseeyourdaughteragain.”11.“MerryfuckingChristmas.”12.“Paybkuslut[sic]'”13.“Here,areyouhappynow?...Thechildrenaregone.Howdoesthatmakeyoufeel...?”14.“Saygoodbyetoyourchildren.”15.“Thisisforyougotwhatuwantednowifeannokids[sic].”16.“Thatwomanwantseverything–myhouseandmymoneyandmykids....She'stryingtotakemetothecleanersandleavemewithnothing–wellI'mnotgoingtolether.”Note:Thesecommunicationswerevariouslyconveyedbythespokenword,phone,text,email,notesleftatthescene,andletters.MYERSETAL.-211

engagedinsuicidalbehaviordiedasaresult,a70%completionrate.Incomparison,21%(n=6)offemaleper-petratorswhodidsodied,a32%completionrate.Thepercentageofmenandwomenwhousedafirearmtocommitsuicidewasessentiallythesame,64%(9/14)and66%(4/6),respectively.Ofnote,allthemenandwomenwhodiedbyself‐inflictedgunshotwoundswereUScases.Duetouncertaintyaboutoffenderintent,twocaseswerenotincludedintheanalysisasrepresentingsuicidalbehavior.Inonecase,amotherwhokilledhertwodaughters(ages17and22years)infrontofherhusbanduponhearinghewantedadivorce,wasshotandkilledbypolicewhorespondedtothecrime.Itispossiblethatthiscaserepresentsanadditionalsuicide–suicidebycop–assherefusedtodropherweaponwhenorderedtodosoandshehadahistoryofsuicideattempts.Likewise,inasecondcase,thefathereventuallysuccumbedtoextensiveburninjurieshereceivedfromsettinghiscaronfireusinggasolinewhilehis3‐year‐olddaughterwasinsidethechainedshutvehicle.Priortothekilling,hehadthreatenedtocommitmurder‐suicide.Aftercatchingonfire,herantoanearbypondtoextinguishhimself.Whetherheintendedtokillhimselfbyself‐immolationandhadachangeofheart,orwhetherignitinghimselfwasaccidental,isunclear.Insum,22offendersdiedbysuicide(n=20)orpossiblesuicide(n=2),leavingthefateoftheremaining40tothejudicialsystem.3.7|JudicialoutcomesOfthe40survivingoffenders,39werefoundguiltyandsentenced.Inonecase,theprosecutionwasseekingalifesentencebutthetrialwasstillpending.Themajorityofthese39offenderswereconvictedofmurderandreceivedoneormorelifesentences(n=24;62%).Eight(21%)receivedprisonsentencesrangingfrom5to30years(mean=19.1years).Five(13%)weresentencedtodeath.Intwointernationalcases,thecourtsentenceswereunspecified.Mentalhealthdefenseswereraisedinfour(10%)cases:threediminishedresponsibilitydefensesandonenotguiltybyreasonofinsanitydefense.Onlyone,adiminishedresponsibilitydefense,wassuccessful–thedefendantreceivedareducedsentenceof16yearsinprison.3.7.1|ComparisonofUnitedStateswithinternationalcasesThe19internationalcaseswerecomparedwiththe43UScases.Thesexoftheinternationalparents,10males(53%)andninefemales(47%),wasequivalenttotheUScases.Thekillingmethodbyinternationaloffenderswasmostlybyasphyxiation(eightcases,42%)orcuttinginstruments(sevencases,37%).Sixofthesevenoffendersinthelattercategoryusedknives,oneusedahatchet.ThisissomewhatsimilartotheUScasesinthatasphyxiationandcuttinginstrumentswerethefirstandthirdmostlikelycausesofvictimdeath.Intheremainingfourinter-nationalcases,onevictimeachdiedbypoisoning,havingtheirheaddashedagainstthefloor,beingthrownoffabridge,andbeingthrownoffacliff.Suicidalbehaviorinthepost‐crimeperiodwasalsoquitecommonintheinternationalsample,andverysimilartotheUSfindings.Twelveof19(63%)internationalperpetratorsengagedinsuicidalbehavior,andfiveofthe19(26%)successfullykilledthemselves.Thisamountstoasuicidecompletionrateof42%;threefathersandtwomothersperishedbytheirownhands.TherewerethreenotabledifferencesbetweentheUSandinternationalcases.First,intheUScases,firearmswerethesecondmostcommonkillingmethod,foundinmorethanaquarterofcases(27%).Noneofthe19in-ternationalcasesinvolvedtheuseoffirearms.Second,fortheUSsample,theleadingbasisoftherevengemotivewas“rejection”(21cases,49%)followedby“custody/visitationdispute”(12cases,28%).Intheinternationalsampleadifferentpictureemerged:themostcommonrevengebasiswas“custody/visitationdispute”(eightcases,42%)followedby“infidelity/jealousy”(sixcases,32%).Third,thejudicialprocessinfive(11%)ofthe44UScasesresultedinthedefendantreceivingadeathpenalty,whereastherewerenodeathsentenceshandedoutforthe212-MYERSETAL.

internationalcases.Thisisnotasurprisingfindinggiventhatoftheninecountriesfromwhichcaseswereobtained,onlytheUnitedStatesandIndiastillhadcapitalpunishmentasanoption.4|DISCUSSIONTotheauthors'knowledge,thisisthefirstresearchefforttospecificallyfocusonrevenge‐motivatedfilicides.Someoftheoverarchingfindingsshowedthattheseperpetratorswereaboutequallylikelytobemaleasfemale;overhalfofthemhadanactivementaldisorderofanytype,mostoftenapersonalitydisorder;andahistoryofdomesticviolencewascommoninthemaleoffenders(presentinoverhalfoftheircases).Furthermore,abouthalfofthemwereunemployedandhadattainedatmostahighschooleducation.Allofthesecharacteristicshavebeenconsideredaspossibleriskfactorsforfilicidesingeneral(Bourgetetal.,2007;Brownetal.,2019;Kauppietal.,2010;Resnick,2016;West,2007).Themeanageofvictimswas6years,withpreschool‐agechildrenkilledmostfrequently,althoughvictimsofallages–fromnewbornstoadults–wererepresented.Mostkillingswereaccomplishedthroughtheuseofasphyxiation,firearms,orknives.Thefindingthatoveraquarter(27%)oftheserevengefilicideswereaccomplishedwithfirearmswasconsistentwiththeearlierdescribedresultsfromalargeUSdatabasestudyspanningthreedecades(Mariano,Chan,&Myers,2014a,2014b).Alternatively,inotherstudieswithaninternationalcomponent,firearmswereusedinlessthan10%ofallfilicides(e.g.,Brownetal.,2019;Resnick,1969).Thattwoormorechildrenweremurderedinhalfoftheserevengefilicidecaseswasnotablyhigherthaninusualfilicidesamples;forexample,inResnick's(1969)internationalstudymorethanonechildwaskilledinjust11%ofthecases,andinBrownetal.'sAustralianstudy,only16%ofcasesweremultiple(i.e.,twoormore)victimincidents.Multiplevictimsperincidentmayprovetobeafeatureofrevengefilicideifreplicatedinfutureresearch.Post‐crimesuicidalbehaviorwascommonplace,andone‐thirdofthesamplediedbysuicide.Mentaldisordersandsuicideareregularfindingsinfilicidesoverall,accordingtobothUSandinternationalresearch(e.g.,Bourgetetal.,2007;Flynn,Shaw,&Abel,2013;Kauppietal.,2010;Resnick,1969).Alloffenderswerecriminallyconvicted,andinonlyonecasewasamentalhealthdefenseofdiminishedre-sponsibilitysuccessfulinlesseningculpability.Perhapsthisisareflectionofthemaliciousnatureofthesecrimes,whichofteninvolvedsignificantpremeditationandplanning,andforwhichonlytwooffendershadpsychoticdisorderdiagnoses.Whileoneoffenderdidactuponadelusionalbelief(duetohavingadelusionaldisorder,jealoustype)thatherhusbandwascheatingonher,thisfactwasnotsufficienttopersuadethefactfinderthatshelackedanappreciationofthewrongfulnessofheractions.ThreemaindifferenceswerediscoveredbetweentheUSandinternationalcases:(1)firearmswereusedinmorethanaquarterofUScases,yetinnoneoftheinternationalcases,likelyrelatedtotheeasieraccesstogunsintheUnitedStatescomparedwithmostothercountriesinthestudy;(2)rejectionwasthemostlikelybasisforrevengeintheUSsample,whilecustody/visitationdisputewastheleadingrevengereasonintheinternationalgroup;and(3)adeathsentencewashandedouttoaboutonein10USdefendantsbuttononeoftheinternationalmurderers.Thisisnotanunexpectedresultinthatonlytwooftheninecountriesfromwhichthecasesemanatedhadcapitalpunishmentasanoption.FourrevengefilicidesubtypeswerereadilyidentifiedinboththeUSandinternationalcases:rejection,custody/visitationdispute,infidelity/jealousy,andargument/conflict.Theseempiricallybasedcategoriesmayproveusefulinfutureresearchforidentifyingchildrenathighriskofbecomingvictims,andinhelpingtoinformtreatmentap-proachesprovidedthroughcorrectionalmentalhealthprograms.Thediversenatureoffilicidecrimesisbecomingincreasinglyapparent,andresearchthatidentifiesfilicidepatternsandclassificationsofpracticalvaluemayimproveourabilitytoidentifyhigh‐riskcasesandthereforeaidinthepreventionofthesecrimes(Bourget&Gagné,2005;Brownetal.,2019).MYERSETAL.-213

4.1|LimitationsTherearemethodologicallimitationsinthisexploratorystudythatdeservemention.First,thissampleofrevengefilicidecasesisnotnecessarilyarepresentativeone.Toputthisinnumericalperspective,weestimatedearlierthatabout21revengefilicidecasesoccurredintheUnitedStatesin2019.Ourstudycovereda20‐yearperiodandincludedcasesnotonlyfromtheUnitedStatesbuteightothercountries,soitisprobablysafetoconcludethathundredsofrevengefilicidesoccurredduringthattime‐frame.Thus,oursamplelikelycomprisesonlyasmallproportionoftherevengefilicidesthatpresumablyoccurredintheseregionsoftheworldbetween1999and2019.However,thecasesweincludedinthisstudywerethosewithsufficientlydetailed,unambiguouscaseinformation,thusgivingustheadvantageofbeingabletoperformmorein‐depthanalysesofrevengefilicidecasesthanwouldbepossiblethroughrelianceonlargebutsuperficialnationalcrimedatabases.Second,itislikelythattheextentofmentaldisordersinthesesubjectswasunderestimated.Inaboutathirdofthecasestheperpetratorscommittedsuicide,anddeterminingthepresenceofmentalillnessinmurder‐suicidecasesisdifficultastherecanbenopost‐arrestmentalstateassessmentandpre‐crimementalhealthrecordsmaynotexist,andiftheydotheyareoftennotdiscoverableorreadilyobtained.Furthermore,inonly10ofthe62casesweretheoffenderspsychiatricallyassessedin‐depthbyoneofthestudyauthors,andthislikelyyieldedricher,moreextensivediagnosticdatathanwasgenerallyavailablefortheother52cases.Third,thepresenceofdomesticviolenceinoursamplemayalsohavebeenunderreported.Inmostinstances,domesticviolenceisnotreportedtolawenforcementandthereforedoesnotroutinelytranslateintoanofficialrecord(U.S.DepartmentofJustice,2018).5|FUTUREDIRECTIONSANDCONCLUSIONClinicians,childprotectionpersonnel,legalprofessionals,andlawenforcementofficerswhointerfacewithparentsinvolvedinacrimonious,deterioratingrelationships,high‐conflictdivorce,orviciouscustody/visitationdisputesshouldremainawareoftheriskofrevengefilicideasapossibleoutcome,especiallywhentherapeuticinterventionsarelackingorineffective.Thelengthstowhichadeeplyaggrievedpartyinanyofthesescenariosmightgotoavengewhattheyperceiveasmaltreatmentbytheirunfaithful,rejecting,orlitigiouspartnerorex‐partnershouldnotbeunderestimated.Basedonthepresentfindings,albeitpreliminary,itappearsthattheriskforrevengefilicidesignificantlyincreaseswhenthereisthepresenceofapersonalitydisorderinoneorbothoftheparties,ahistoryofdomesticviolence,hatredorintensejealousytowardtheotherparentfollowingmaritalorrelationshiprupture,infidelity,and/orfamilycourtwarfare.Furtherresearchonrevengefilicideisnecessarytobetterunderstandcontributingfactors,improvedetectionandpreventivemeasures,andinformlegaldecision‐making.REFERENCESBourget,D.,&Gagné,P.(2005).PaternalfilicideinQuébec.JournaloftheAmericanAcademyofPsychiatryandtheLaw,33,354–360.Bourget,D.,Grace,J.,&Whitehurst,L.(2007).Areviewofmaternalandpaternalfilicide.JournaloftheAmericanAcademyofPsychiatryandtheLaw,35,74–82.Brown,T.,Lyneham,S.,Bryant,W.,Bricknell,S.,Tomison,A.,Tyson,S.,&FernandezArias,P.(2019).FilicideinAustralia, 2000-2012:Anationalstudy.Reporttothecriminologyresearchadvisorycouncil.Retrievedfromhttps://www.aic.gov.au/sites/default/files/2020‐05/52‐1415‐FinalReport.pdfCarruthers,G.(2016).Makingsenseofspousalrevengefilicide.AggressionandViolentBehavior,29,30–35.Coorg,R.,&Tournay,A.(2012).Filicide‐suicideinvolvingchildrenwithdisabilities.JournalofChildNeurology,28(6),745–751.Darwin,C.(1871).Thedescentofman,andselectioninrelationtosex.NewYork,NY:D.AppletonandCompany.Davies,T.March7(2007).Pilotcrashesintoex‐in‐law'shouse.TheBostonGlobeRetrievedfromhttp://archive.boston.com/news/nation/articles/2007/03/07/pilot\_crashes\_into\_ex\_in\_laws\_house214-MYERSETAL.

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