

Table S1. Joinpoint Regression Model Output for the Prevalence Rate Trend Analysis of Deciduous Teeth Caries in Three Locations between 1990 and 2021 based on the Global Burden of Disease Database.

Segments	Global		North Africa and Middle East		Iran	
	Time interval	APC (95% CI)	Time interval	APC (95% CI)	Time interval	APC (95% CI)
Trend 1	1990-2000	-0.209* (-0.25, -0.14)	1990-1995	0.026 (-0.01, 0.10)	1990-1994	-0.105* (-0.20, -0.05)
Trend 2	2000-2011	-0.340* (-0.50, -0.35)	1995-2000	-0.116* (-0.17, -0.07)	1994-2006	-0.010 (-0.02, 0.03)
Trend 3	2011-2021	-0.008 (-0.05, 0.04)	2000-2006	-0.260* (-0.30, -0.23)	2006-2010	-0.170* (-0.24, -0.02)
Trend 4	-	-	2006-2009	-0.960* (-1.00, -0.90)	2010-2014	0.193 (-0.15, 0.25)
Trend 5	-	-	2009-2012	-0.225* (-0.27, -0.16)	2014-2019	0.078* (0.01, 0.15)
Trend 6	-	-	2012-2019	0.050* (0.03, 0.08)	2019-2021	-0.245* (-0.33, -0.11)
Trend 7	-	-	2019-2021	-0.462* (-0.56, -0.32)	-	-
AAPC	1990-2021	-0.209* (-0.22, -0.19)	1990-2021	-0.198* (-0.20, -0.19)	1990-2021	-0.017* (-0.02, -0.01)

*Significant at 0.05 level.

Table S2. Joinpoint Regression Model Output for the DALY Rate Trend Analysis of Deciduous Teeth Caries in Three Locations between 1990 and 2021 based on the Global Burden of Disease Database.

Segments	Global		North Africa and Middle East		Iran	
	Time interval	APC (95% CI)	Time interval	APC (95% CI)	Time interval	APC (95% CI)
Trend 1	1990-2000	-0.195* (-0.23, -0.13)	1990-1994	0.076* (0.02, 0.17)	1990-2006	-0.003 (-0.01, 0.01)
Trend 2	2000-2011	-0.382* (-0.47, -0.34)	1994-1999	-0.052* (-0.2, -0.01)	2006-2009	-0.198* (-0.26, -0.07)
Trend 3	2011-2021	0.000 (-0.04, 0.05)	1999-2006	-0.260* (-0.30, -0.23)	2009-2019	0.132* (0.11, 0.18)
Trend 4	-	-	2006-2009	-0.986* (-1.03, -0.92)	2019-2021	-0.361* (-0.54, -0.16)
Trend 5	-	-	2009-2012	-0.198* (-0.24, -0.11)	-	-
Trend 6	-	-	2012-2019	0.057* (0.03, 0.09)	-	-
Trend 7	-	-	2019-2021	-0.502* (-0.60, -0.40)	-	-
AAPC	1990-2021	-0.199* (-0.21, -0.18)	1990-2021	-0.191* (-0.20, -0.18)	1990-2021	-0.001 (-0.01, 0.00)

*Significant at 0.05 level.

Table S3. Joinpoint Regression Model Output for the Incidence Rate Trend Analysis of Permanent Teeth Caries in Three Locations between 1990 and 2021 based on the Global Burden of Disease Database.

Segments	Global		North Africa and Middle East		Iran	
	Time interval	APC (95% CI)	Time interval	APC (95% CI)	Time interval	APC (95% CI)
Trend 1	1990-1995	0.134* (0.07, 0.21)	1990-1995	0.030* (0.00, 0.05)	1990-2000	-0.034* (-0.06, 0.00)
Trend 2	1995-2000	-0.246* (-0.32, -0.20)	1995-2000	-0.174* (-0.22, -0.14)	2000-2005	-0.815* (-0.88, -0.74)
Trend 3	2000-2005	0.794* (0.75, 0.83)	2000-2005	0.003 (-0.5, 0.04)	2005-2010	0.037 (-0.03, 0.11)
Trend 4	2005-2013	0.120* (0.07, 0.15)	2005-2009	0.245* (0.20, 0.30)	2010-2015	1.043* (1.00, 1.10)
Trend 5	2013-2019	0.285* (0.24, 0.41)	2009-2015	0.173* (0.10, 0.19)	2015-2021	-0.056* (-0.11, 0.00)
Trend6	2019-2021	-0.100 (-0.24, 0.09)	2015-2021	-0.041* (-0.06, -0.02)	-	-
AAPC	1990-2021	0.189* (0.18, 0.20)	1990-2021	0.34* (0.03, 0.04)	1990-2021	0.0194* (0.01, 0.02)

*Significant at 0.05 level

Table S4. Joinpoint Regression Model Output for the Prevalence Rate Trend Analysis of Permanent Teeth Caries in Three Locations between 1990 and 2021 based on the Global Burden of Disease Database.

Segments	Global		North Africa and Middle East		Iran	
	Time interval	APC (95% CI)	Time interval	APC (95% CI)	Time interval	APC (95% CI)
Trend 1	1990-2000	-0.071* (-0.09, -0.05)	1990-1992	-0.561* (-0.68, -0.36)	1990-1996	-0.054 (-0.23, 0.04)
Trend 2	2000-2005	-0.710* (0.67, 0.74)	1992-1995	-0.212 (-0.28, 0.35)	1996-2000	0.524* (0.03, 0.73)
Trend 3	2005-2010	-0.402* (-0.47, -0.35)	1995-2000	0.352 (-0.17, 0.43)	2000-2005	0.785 (-0.22, 0.94)
Trend 4	2010-2015	-0.071*(-0.12, 0.00)	2000-2006	-0.181* (-0.80, -0.14)	2005-2010	-0.245* (-1.46, -0.17)
Trend 5	2015-2019	-0.754* (-0.82, -0.70)	2006-2009	-0.835* (-0.90, -0.33)	2010-2015	-1.464 (-1.54, 0.02)
Trend6	2019-2021	-0.088 (-0.25, 0.03)	2009-2015	-0.292* (-0.34, -0.17)	2015-2021	0.077 (-0.01, 0.16)
Trend 7	-	-	2015-2021	0.140* (0.09, 0.20)	-	-
AAPC	1990-2021	-0.146* (-0.09, -0.08)	1990-2021	-0.080* (-0.15, -0.14)	1990-2021	-0.080* (-0.09, -0.06)

*Significant at 0.05 level

Table S5. Joinpoint Regression Model Output for the DALY Rate Trend Analysis of Permanent Teeth Caries in Three Locations between 1990 and 2021 based on the Global Burden of Disease Database.

Segments	Global		North Africa and Middle East		Iran	
	Time interval	APC (95% CI)	Time interval	APC (95% CI)	Time interval	APC (95% CI)
Trend 1	1990-2000	-0.063* (-0.08, -0.04)	1990-1992	-0.562* (-0.71, -0.31)	1990-1996	-0.045 (-0.14, 0.02)
Trend 2	2000-2005	-0.712* (0.70, 0.74)	1992-1995	-0.208 (-0.27, 0.37)	1996-2001	0.570* (0.40, 0.66)
Trend 3	2005-2010	-0.392* (-0.45, -0.34)	1995-2000	0.340 (-0.14, 0.47)	2001-2004	1.030* (0.84, 1.13)
Trend 4	2010-2015	-0.069* (-0.11, 0.00)	2000-2005	-0.128* (-0.71, -0.06)	2004-2008	-0.050 (-0.14, 0.10)
Trend 5	2015-2019	-0.750* (-0.82, -0.70)	2005-2009	-0.692* (-0.80, -0.35)	2008-2011	-0.560* (-0.68, -0.41)
Trend6	2019-2021	-0.149* (-0.31, -0.03)	2009-2014	0.364 (-0.45, 0.10)	2011-2014	-2.000* (-2.11, -1.90)
Trend 7	-	-	2014-2021	0.081* (0.02, 0.17)	2014-2021	-0.054* (-0.10, 0.00)
AAPC	1990-2021	-0.087* (-0.09, -0.08)	1990-2021	-0.152* (-0.16, -0.14)	1990-2021	-0.086* (-0.09, -0.07)

*Significant at 0.05 level

Table S6. Joinpoint Regression Model Output for the Incidence Rate Trend Analysis of Oral Disorders in Three Locations between 1990 and 2021 based on the Global Burden of Disease Database.

Segments	Global		North Africa and Middle East		Iran	
	Time interval	APC (95% CI)	Time interval	APC (95% CI)	Time interval	APC (95% CI)
Trend 1	1990-1995	-0.034* (-0.07, 0.07)	1990-1996	-0.051 (-0.09, 0.00)	1990-1994	-0.199* (-0.33, -0.13)
Trend 2	1995-2000	-0.183* (-0.26, -0.14)	1996-2001	-0.271* (-0.33, -0.18)	1994-2000	-0.028 (-0.06, 0.05)
Trend 3	2000-2005	-0.256* (0.21, 0.31)	2001-2004	-0.690* (-0.75, -0.57)	2000-2004	-0.549* (-0.63, -0.47)
Trend 4	2005-2010	-0.126* (-0.18, -0.07)	2004-2007	-0.346* (-0.56, -0.28)	2004-2010	-0.073* (-0.11, -0.03)
Trend 5	2010-2016	0.137* (0.00, 0.16)	2007-2010	-0.561* (-0.62, -0.45)	2010-2015	-0.651* (0.60, 0.70)
Trend6	2016-2019	0.271* (0.19, 0.33)	2010-2015	-0.207* (0.15, 0.27)	2015-2019	0.036* (0.00, 0.45)
Trend 7	2019-2021	-0.383* (-0.48, -0.25)	2015-2021	0.013 (-0.04, 0.05)	2019-2021	0.239 (-0.36, -0.08)
AAPC	1990-2021	0.014* (0.00, 0.02)	1990-2021	-0.172* (-0.18, -0.16)	1990-2021	-0.022* (-0.03, -0.01)

*Significant at 0.05 level

Table S7. Joinpoint Regression Model Output for the Prevalence Rate Trend Analysis of Oral Disorders in Three Locations between 1990 and 2021 based on the Global Burden of Disease Database.

Segments	Global		North Africa and Middle East		Iran	
	Time interval	APC (95% CI)	Time interval	APC (95% CI)	Time interval	APC (95% CI)
Trend 1	1990-1994	-0.237* (-0.36, -0.17)	1990-1993	-0.222* (-0.32, -0.17)	1990-1997	-0.103* (-0.17, -0.07)
Trend 2	1994-2000	-0.110 (-0.14, 0.10)	1993-1996	0.019 (-0.03, 0.06)	1997-2000	0.083 (0.00, 0.55)
Trend 3	2000-2005	0.335* (0.30, 0.40)	1996-1999	0.444* (0.39, 0.48)	2000-2005	0.691* (0.65, 0.74)
Trend 4	2005-2010	-0.490* (-0.52, -0.45)	1999-2005	0.029* (0.00, 0.05)	2005-2011	-0.275* (-0.31, -0.24)
Trend 5	2010-2015	0.288* (0.25, 0.32)	2005-2009	-0.450* (-0.50, -0.41)	2011-2014	-0.797* (-0.85, -0.69)
Trend6	2016-2018	-0.396* (-0.45, -0.32)	2009-2014	-0.197* (-0.23, -0.15)	2014-2021	-0.010 (-0.04, 0.02)
Trend 7	2018-2021	-0.078 (-0.15, 0.06)	2014-2021	0.056* (0.04, 0.07)	-	-
AAPC	1990-2021	-0.077* (-0.08, -0.07)	1990-2021	-0.048* (-0.05, -0.04)	1990-2021	-0.044* (-0.04, -0.03)

*Significant at 0.05 level

Table S8. Joinpoint Regression Model Output for the DALY Rate Trend Analysis of Oral Disorders in Three Locations between 1990 and 2021 based on the Global Burden of Disease Database.

Segments	Global		North Africa and Middle East		Iran	
	Time interval	APC (95% CI)	Time interval	APC (95% CI)	Time interval	APC (95% CI)
Trend 1	1990-1993	-0.724* (-0.88, -0.63)	1990-1995	-0.046 (-0.13, 0.01)	1990-2004	0.042 (-0.02, 0.11)
Trend 2	1993-2000	-0.392* (-0.41, -0.35)	1995-2005	0.419* (0.40, 0.44)	2004-2010	-2.054* (-2.22, -1.8)
Trend 3	2000-2005	0.419* (0.38, 0.45)	2005-2010	-0.900* (-0.93, -0.86)	2010-2015	2.785* (2.56, 3.01)
Trend 4	2005-2009	-0.316* (-0.39, -0.26)	2010-2021	-0.029* (-0.04, -0.01)	2015-2021	-0.074 (-0.28, 0.11)
Trend 5	2009-2016	-0.104* (-0.14, -0.05)	-	-	-	-
Trend6	2016-2021	0.224* (0.17, 0.30)	-	-	-	-
AAPC	1990-2021	-0.120* (-0.12, -0.11)	1990-2021	-0.029* (-0.03, -0.02)	1990-2021	0.046* (0.01, 0.07)

*Significant at 0.05 level

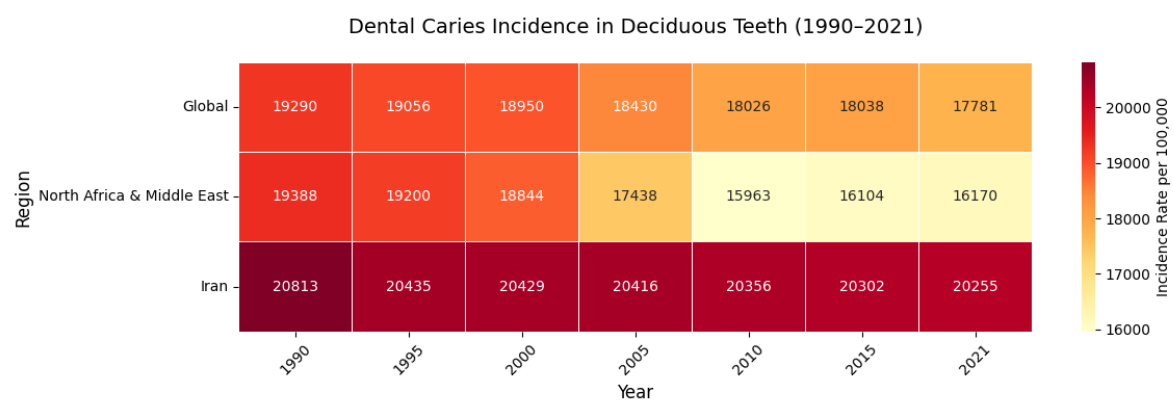


Figure S1. Heat Map of Dental Caries Incidence in Deciduous Teeth.

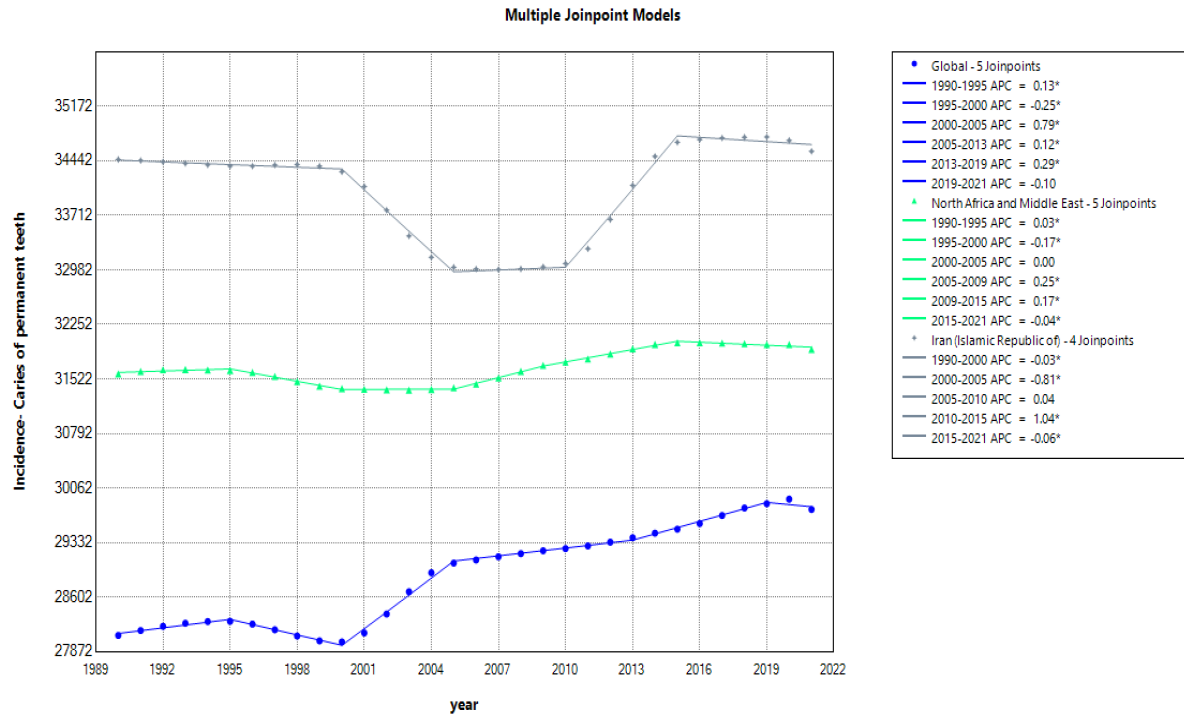


Figure S2. Multiple Joinpoint Regression Model of the Incidence Rate of Permanent Teeth Caries in Three Locations between 1990 and 2021 based on the Global Burden of Disease Database.

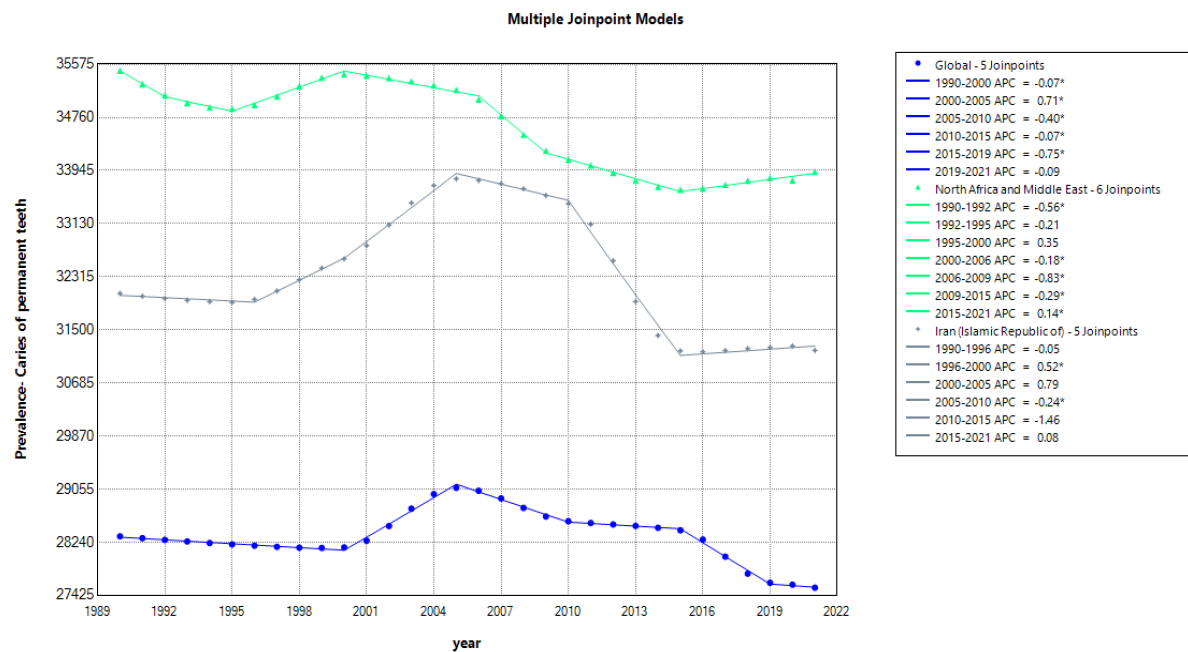


Figure S3. Multiple Joinpoint Regression Model of the Prevalence Rate of Permanent Teeth Caries in Three Locations between 1990 and 2021 based on the Global Burden of Disease Database.

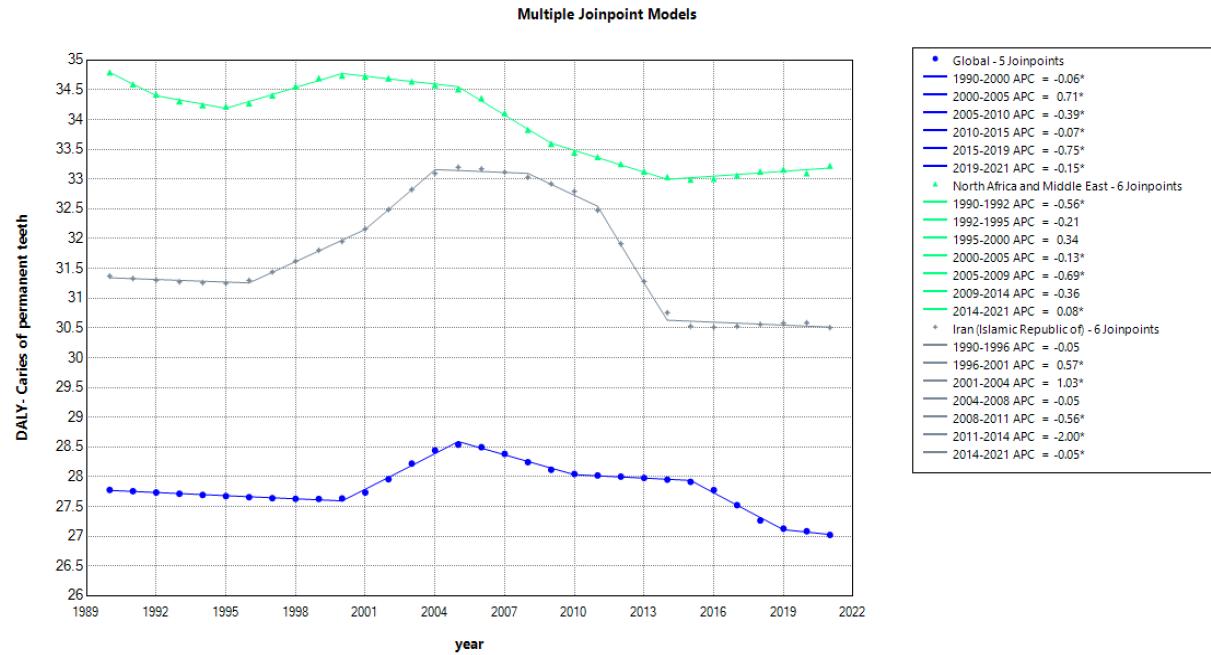


Figure S4. Multiple Joinpoint Regression Model of the DALY Rate of Permanent Teeth Caries in Three Locations between 1990 and 2021 based on the Global Burden of Disease Database.

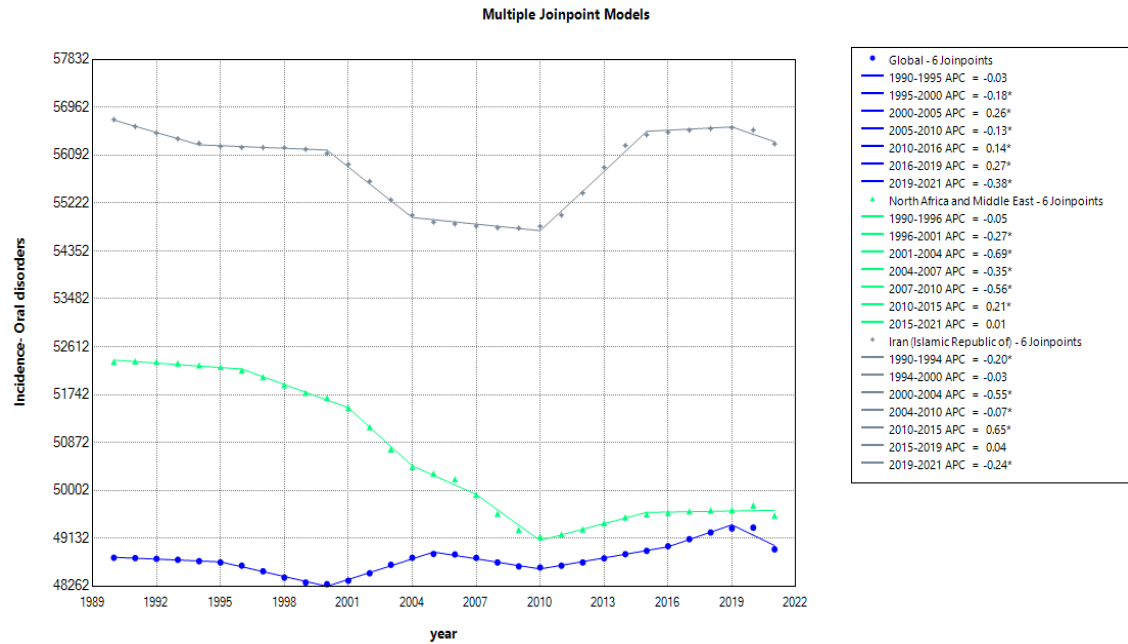


Figure S5. Multiple Joinpoint Regression Model of the Incidence Rate of Oral Disorders in Three Locations between 1990 and 2021 based on the Global Burden of Disease Database.

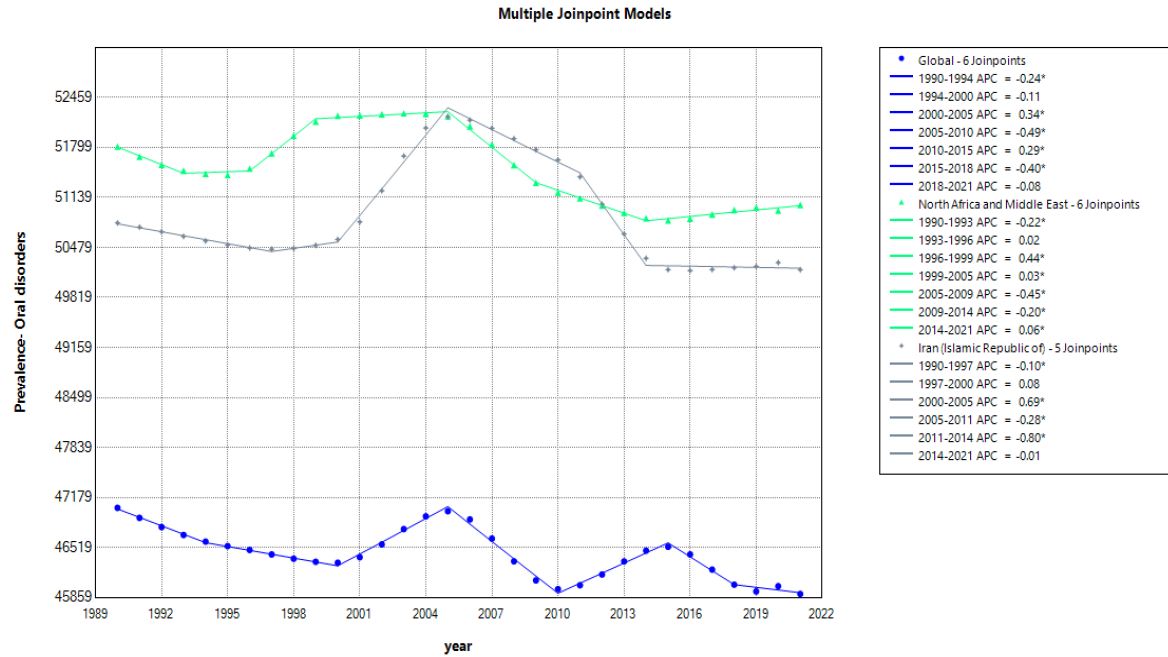


Figure S6. Multiple Joinpoint Regression Model of the prevalence Rate of Oral Disorders in Three Locations between 1990 and 2021 based on the Global Burden of Disease Database.

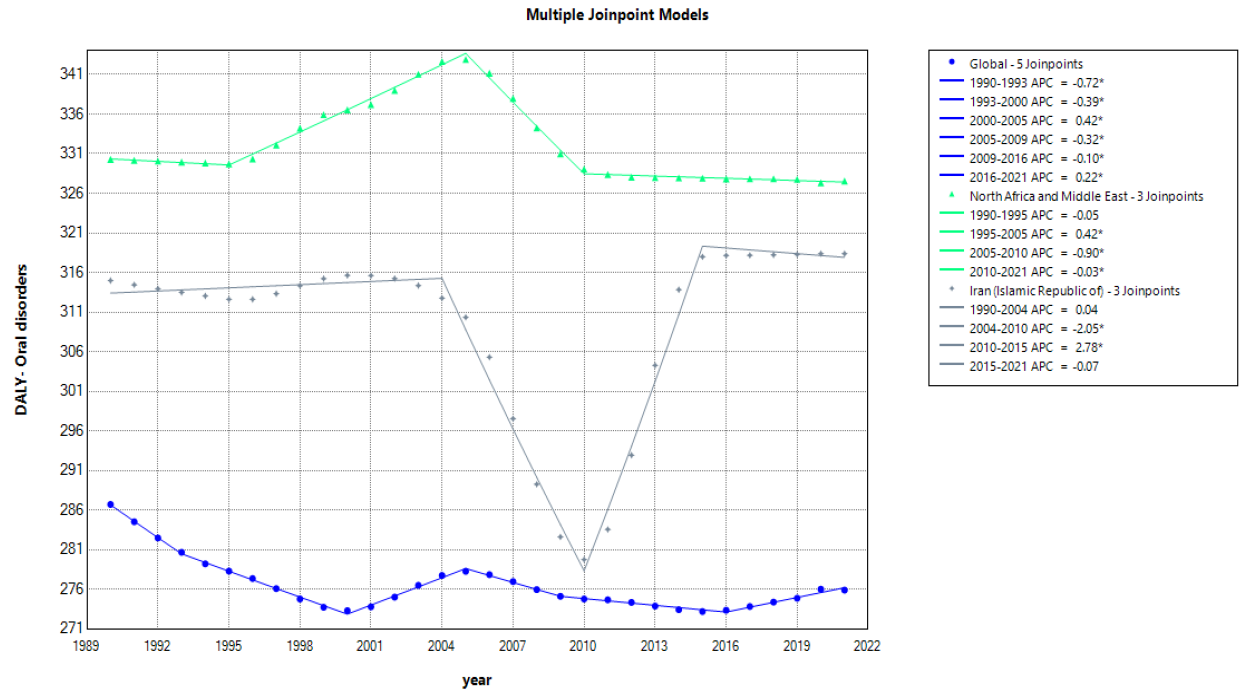


Figure S7. Multiple Joinpoint Regression Model Output of the DALY Rate of Oral Deciduous in Three Locations between 1990 and 2021 based on the Global Burden of Disease Database.