>Study demonstrates the extraordinary scale of the drug's global popularity

By Jeremy Laurance Health Editor

ITIS 40 years since cannabis unleashed the "flower power" revolution of the 1960s, encouraging a generation in Europe and the US to "make love not war". Young people at the time hoped their legacy would be world peace. Instead, it has turned out to be a world of fuzzy dope-heads.

In the intervening decades, the drug whose intoxicating effects have been known for 4,000 years has been increasingly adopted by adolescents and young adults across the globe.

Today, an estimated one in 25 adults of working age – 166 million people around the world – has used cannabis to get high, either in ignorance or definance of its damaging effects on health. Now, the extraordinary popularity of the drug is posing a significant public health challenge, doctors say.

Writing in *The Lancet*, Wayne Hall of the University of Queensland and Louisa Degenhardt of the University of New South Wales, Australia, say cannabis slows reaction times and increases the risk of accidents, causes bronchitis, terferes with learning, memory and cation and, most seriously, may

per population Level of Cannabis USE, 2007 (annual prevalence) ...) Over 8% Main cultivation areas 5-8% 1-5% or data not available up to 1% use, extent unknown (3 3 G 3 Source: The Lancet

double the risk of schizophrenia. Yet these effects have failed to dent its

"Since cannabis use was first reported over 40 years ago by US college students, its recreational or non-medical use has spread globally, first to high-

income countries, and recently to lowincome and middle-income countries,"

they say.
Citing figures from the UN Office on Citing figures from the UN Office on Drugs and Crime for 2006, they say cannabis use is highest in the US, Australia and New Zealand (where more tralia and New Zealand)

than 8 per cent of the population indulge), followed by Europe. But because Asia and Africa have bigger populations, they also have the highest proportion of the world's cannabis users, accounting for almost a third (31 per cent) and a quarter (25 per cent) respectively.

Use of cannabis among young people rose strongly during the 1960s and 1970s, peaking in the US in 1979. There was then a long decline until it increased again in the 1990s, before levelling off once more since 2000. In Britain, Australia and New Zealand, cannabis use has been falling for several years, but it is thought to be rising in Latin America and several countries in Africa.

up in the morning. Marriage and babies of those who ever smoke a joint become accelerate the decline. About one in 10 into jobs and discover they have to get clines steeply as young people move ing in the mid-20s. The habit then dejoint in their mid-teens, with use peakregular daily users, with 20 to 30 per users are also more likely to use other cent using the drug weekly. Regular drugs. But the authors admit this sup-"soft" drugs act as a "gateway" to hard caine, lending support to the theory that illicit drugs, including heroin and cosiderable debate" posed link "remains a subject of con-The typical user smokes their first

However, they add that the ill effects of cannabis are modest when compared of cannabis are modest when compared with the damage done by alcohol, to-bacco and other illicit drugs. In Australia, it accounted for just 0.2 per cent of the total burden of disease.

**Table 2.6.** Globalization: Growth in Volume of World Trade and GDP, 1500–2003 (annual average compound growth rates)

= 2 8	World Trade	World GDP		col.1/2
1500–1820	0.96	0.32		3.0
1820-70	4.18	0.94	7.	4.4
1870-1913	3.40	212		1.6
1913–50	0.90	1.82		0.5
1950-73	7.88	4.90		1.6
1973-2003	5.38	3,17		1.7
1820-2003	3.97	2.25		1.8

Notes and Sources: World trade volume 1500–1820 derived from growth in tonnage of the world merchant fleet (Maddison 2001: 95) with a 50 per cent upward adjustment for technical improvements which augmented effective carrying capacity; 1820–70 from Maddison (1982: 254); 1870–1990 from Maddison (2001: 362), updated to 2003 from IMF International Financial Statistics. World GDP from www.ggdc.net/Maddison. See O'Rourke and Williamson (2002), for a similar estimate of the growth in intercontinental trade volume for 1500–1800, obtained by a totally different approach.

## e 3-2a. Growth in Volume of Merchandise Exports, World and Major Regions, 1870-1998 (annual average compound growth rates)

1 8 1	1870-1913	1913-50	1950-73	1973-98
	10/0-1/13	1313 30	1330 75	, , , ,
rn Europe	3.24	-0.14	8.38	4.79
rn Offshoots	4.71	2.27	6.26	5.92
i Europe & former USSR	3.37	1.43	9.81	2.52
ımerica	3.29	2.29	4.28	6.03
	2.79	1.64	9.97	5.95
	4.37	1.90	5.34	1.87
	3.40	0.90	7.88	5.07

## 23-2b. Merchandise Exports as Per Cent of GDP in 1990 Prices, World and Major Regions, 1870-1998

	1870	1913	1950	1973	1998
rn Europe	8.8	14.1	8.7	18.7	35.8
rn Offshoots	3.3	4.7	3.8	6.3	12.7
1 Europe & former USSR	1.6	2.5	2.1	6.2	13.2
America	9.7	9.0	6.0	4.7	9.7
	1.7	3.4	4.2	9.6	12.6
	5.8	20.0	15:1	18.4	14.8
	4.6	7.9	5.5	10.5	17.2

Table 3-2c. Regional Percentage Shares of World Exports, 1870-1998

	1870	1913	1950	1973	1998
rn Europe	64.4	60.2	41.1	45.8	42.8
rn Offshoots	7.5	12.9	21.3	15.0	18.4
n Europe & former USSR	4.2	4.1	5.0	7.5	4.1
America	5.4	5.1	8.5	3.9	4.9
	13.9	10.8	14.1	22.0	27.1
	4.6	6.9	10.0	5.8	2.7
-1	100.0	100.0	100.0	100.0	100.0

Tables 3–2a and 3–2c are derived from Table F–3. In Table 3–2b, exports in 1990 US dollars from Table F–3 are divided by GDP in 1990 international dollars.

Table 2–13. Commodity Composition of Brazilian Exports, 1821–1951 (per cent of total)

	Cotton	Sugar	Coffee	Rubber	Cocoa
1821-3	25.8	23.1	18.7	0.0	n.a.
1871-3	16.6	12.3	50.2	0.0	n.a.
1901–3	2.6	2.4	55.7	22.5	2.5
1927-9	2.0	0.5	71.1	2.0	3.8
1949-51	10.0	0.3	60.5	0.2	4.8

Source:

1821-73 from Leff (1982), Vol.II, p. 9. 1901-51 from O Brasil em Numeros.

Table 2-4. Sugar Production by Area of Origin, 1456-1894 (metric tons)

		Cyprus	Madeira	São Tomé	Brazil	British Caribbean	French Caribbean	Other Caribbean	Rest of World
145	6	800	80						
150	00	375	2 500						
158	80		500	2 200°	2 300				
170	00				20 000	22 000	10 000	5 000	
176	60				28 000	71 000	81 000	20 000	
178					19 000	106 000	125 000	36 000	
181					75 000	168 000	36 600	66 200	18 500
189				· ·	275 000	260 200	79 400	1 119 000	6 523 600
a) 155	0s.								

Source:

1486–1787 from Blackburn (1997), pp. 109, 172, 403 and Schwartz (1985), p. 13; 1815–94 from Williams (1970), pp. 366, 377–80. The figure for rest of world includes 10 000 tons of beet sugar in 1815 and 4 725 000 tons in 1894. Sugar beet production started in Europe during the Napoleonic wars.

Table 3-21. World Production of Crude Oil and Natural Gas, 1950-99 (million metric tons)

		1	mamon meu	ic toris)		2 TO 2	
Country	1950	1973	1999	Country	1950	1973	1999
Bahrain	1.5	3.4	2.2	Former USSR	37.9	429.1	370.2
Iran	32.3	293.2	176.2				
Iraq	6.6	99.5	124.7	Romania		14.3	6.6
Kuwait	17.3	150.6	95.6	Other Eastern Europe		8.2	5.6
Oman		14.6	46.1				
Qatar	1.6	27.5	31.2	Total Eastern Europe		22.5	12.3
Saudi Arabia	26.6	380.2	426.3				
Syria		5.5	29.2	Argentina	3.4	21.9	43.0
United Arab Emirates	. <u>L</u>	73.6	101.7	Brazil		8.3	57.4
Yemen	V 5 🚊 .	0 0 <del>20</del>	19.4	Colombia	4.7	9.8	41.8
6. <del></del>				Ecuador	0.3	10.6	20.7
Total West Asia	85.9	1 054.1	1 052.7	Mexico	10.4	27.2	163.4
Total Frederica				Peru	2.1	3.6	5.3
China	n.a.	53.6	160.6	Venezuela	80.0	178.4	161.7
India	0.3	7.2	38.0	Other Latin America	n.a.	12.3	13.0
Indonesia	6.4	66.1	63.9				
Malaysia	n.a.	4.3	37.6	<b>Total Latin America</b>	n.a.	272.1	506. 3
Other East Asia	n.a.	13.6	37.6				
				Algeria	-	51.1	58.5
Total East Asia	n.a.	91.3	177.0	Angola		8.2	37.6
rotal East / Isla	******			Congo		2.1	12.9
Norway		1.6	149.3	Egypt	2.6	8.5	41.5
United Kingdom	0.2	0.5	139.2	Gabon		7.6	16.8
Other West Europe	n.a.	18.3	31.7	Libya		106.2	65.0
Other West Ediope	11 11 11 11 11	14.55.5		Nigeria			99.5
Total Western Europe	n.a.	20.4	320.2	Other Africa	-	3.9	17.5
United States	266.7	513.3	359.6	<b>Total Africa</b>		289.0	349.3
Canada		94.1	114.1				
Australia		19.2	24.6	World	523.0	2 858.9	3 449.5
New Zealand		0.2	2.1				
Total Western Offshoots		626.8	500.4				

Table 2–23. Structure of British Commodity Trade by Origin and Destination, 1710–1996 (per cent of total current value)

84	Europe	Asia	Africa	North America	British West Indies	Other America	Australia & New Zealand
				Imports			
1710°	63.6	6.9	0.4	7.3	21.7	0.1	0.0
1774	46.1	11.4	0.4	12.5	29.3	0.3	0.0
1820	26.8	24.6	0.5	14.6	26.0	7.5	0.0
1913	40.7°	15.7	3.0	22.6	$0.8^{\circ}$	9.6	7.6
1950	27.8 <sup>b</sup>	17.2	11.0	15.9	5.1°	8.6	14.4
1996	61.7	18.8	2.2	14.1	0.3°	1.7	1.2
1330	0						
				Exports and Re-	exports		
					2.4	0.6	0.0
1710 <sup>a</sup>	87.6	2.1	1.2	5.1	3.4	0.6	
1774	58.5	3.9	6.0	21.5	10.0	0.1	0.0
1820	61.8	7.1	1.1	11.7	9.0	9.3	0.0
1913	37.4 <sup>b</sup>	22.7	6.4	13.5	1.0°	8.7	10.3
1950	28.8 <sup>b</sup>	18.9	13.2	14.4	1.7°	7.2	15.8
1996	63.3	16.8	3.0	13.3	0.3°	1.5	1.8

a) England and Wales; b) includes North Africa; c) includes all Caribbean.

Source:

Mitchell and Deane (1962), pp. 309–11 (for 1710–1820); pp. 317–23 (for 1913). Mitchell and Jones (1971) pp. 136–9 (for 1950). UN Yearbook of International Trade Statistics (1996), p. 1065 for 1996. From Mitchell and Deane (1962), pp. 2679–84, it appears that reexports were 58 per cent of domestic exports (i.e. 37 per cent of total exports) in the 1720s and 1770s. This compares with 53 per cent and 220 per cent in the Netherlands for these two periods (see Table 2–19 above). In 1913, British reexports were 20.8 per cent of domestic exports, and in 1950, 3.9 per cent. In 1710, woollen and worsted yarn and manufactures were 78 per cent of domestic exports; in 1774, 49 per cent; in 1820, 12 per cent; and in 1913, 6 per cent. Cotton yarn and manufactures were 2 per cent of domestic exports in 1774; 62 per cent in 1820; 24 per cent in 1913; and 11 per cent in 1938.