Dermato-Venereology in the Nordic Countries

Tattoos and Body-piercings among French Teenagers

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The prevalence of tattooing and body piercing (BP) in the French population aged ≥15 years are approximately 17% (1) and 12% (2), respectively. According to various European and North American studies (3), the specific prevalence of tattooing and BP among teenagers is approximately 7-15% and 20-30%, respectively. We performed an analysis, extracted from our previous survey conducted online between April and August 2017 (1, 2), focusing on tattoos and BP among French teenagers. We reviewed the responses of 175 teenagers aged 15-18 years extracted from a representative sample of 5,000 individuals from the general population (3.5% of the population). We enquired about demographics, smoking, BP (softear lobe excluded), tattoos, hesitation, regrets, and motivations. Quality of life was evaluated using the SF-12® health survey.

BODY PIERCING

The results showed that 9.7% of respondents currently had ≥ 1 BP (girls 13.6%, boys 7.4%), 5.7% had 1 BP and 4.0% had >1 BP (Table I). Teenagers with BP were more likely to smoke (47% vs 15%, p=0.004), girls especially (55.5% vs 15%, p=0.003). The most common body parts for piercings were the external part of the ear (54.5%/3.4% of the total survey population), the inner part of the ear (27.3%/1.7%), followed by the nose, belly button and nipple (9.1% each/0.6%). The results showed that 40.9% hesitated before their first BP, but only 5.9% expressed regret. Motivations included embellish-

Table I. Characteristics of the study population for body piercing (BP) (15–18 years)

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	Total n = 175	Male n=109	Female n=66	
	n=1/5	n=109	n=00	<i>p</i> -value ^a
Prevalence by sex, n (%)				
Has	17 (9.7)	8 (7.4)	9 (13.6)	< 0.001
Has ever had	22 (12.6)	12 (11.0)	10 (15.1)	NS
Smoking, n (%)				
Total	32 (18.3)	22 (20.2)		
With BP	8 (47)*	3 (37.5)	5 (55.5)**	p=0.004
				**p=0.003
Hesitations before the first BP b , n (%)				•
Not at all	13 (59.1)	5 (41.7)	8 (80)	NS
A bit	7 (31.8)	5 (41.7)	2 (20)	_
A lot	2 (9.1)	2 (16.7)	0 (0)	_
Regrets				
No regrets	17 (94)°	1 (12.5)	0 (0)	NS
Self-reported motivations for getting E				
Body embellishment	11 (50)	3 (25)	8 (80)	0.03
Individuality, distinction	5 (22.7)	2 (16.7)	3 (30)	NS
Body appropriation	3 (13.6)	2 (16.7)	1 (10)	NS
Eroticism, sexuality	3 (13.6)	3 (25)	0 (0)	_
Commitment	1 (4.5)	0 (0)	0 (0)	_
Tradition, culture	0 (0)	0 (0)	0 (0)	_
Endurance/stamina	1 (4.5)	1 (8.3)	1 (10)	NS
No reason	3 (13.6)	2 (16.7)	1 (10)	NS
Quality of life SF-12, mean±SD				
BP				
Physical composite score	53.3±7.3			NS***
Mental composite score	40.5 ± 12.3			NS***
No BP (ref.)				
Physical composite score	54.9 ± 6.8			
Mental composite score	41.4±9.6			
Self-reported side-effects, <i>n</i> (%)				
No	13 (59.1)	6 (50)	7 (70)	NS
Yes, once	5 (22.7)	2 (16.7)	3 (30)	_
Yes, waxing and waning	2 (9.1)	2 (16.7)	0 (0)	_
Yes, persistent	2 (9.1)	2 (16.7)	0 (0)	_
Healing problems	2 (22)	1 (16.7)	1 (33)	NS
Irritation	3 (33.3)	1 (16.7)	2 (66)	NS
Infection	7 (77.8)	5 (83.3)	2 (66)	NS
Itch	1 (11.0)	0 (0)	1 (33)	NS

^aFischer's exact test or Student's t-test.

NS: not significant (p > 0.05).

^bThe overall respondent's number is 22: 5 teenagers, who had their BP removed, self-reported their motivations for getting a BP and their hesitations before their first BP.

^cOut of 17 responses.

^dTotal over 100% as respondents could give several answers.

^{*}p=0.004 is for the total column (smokers with BP versus smokers without BP).

^{**}p=0.003 is for the femal column (female smokers with BP versus female smokers without BP).

^{***}BP compared with no BP

Table II. Characteristics of the study population for tattoos

	Total $n = 175$	Male $n = 109$	Female $n = 66$	<i>p</i> -value ^a		
Prevalence by sex, n (%)	18 (10.3)	14 (12.8)	4 (6.1)	NS		
Smoking	10 (10.5)	11 (12.0)	1 (0.1)	110		
Without tattoos	27 (17.2)	19 (20)	8 (12.9)			
With tattoo(s)	5 (27.8)	3 (21.4)	2 (50)	NS		
Hesitations before the first tattoo, n (%)						
Not at all	7 (38.9)	4 (28.6)	3 (75)	NS		
A bit	8 (44.4)	7 (50)	1 (25)	-		
A lot	3 (16.7)	3 (21.4)	0 (0)	_		
Regrets	- ()	- ()	• (•)			
No regrets	1 (5.6)	1 (7.1)	0(0)	_		
Tattoo decision-making: alone or discussion with family or friends ^b , n (%)						
Alone	5 (27.8)	4 (28.5)	1 (25)	NS		
Parents	7 (38.9)	5 (35.7)	2 (50)	NS		
Family	6 (33.3)	6 (42.8)	0 (0)	NS		
Friends	3 (16.7)	2 (14.3)	1 (25)	NS		
Significant other	2 (11.1)	1 (7.1)	1 (25)	0.02		
Self-reported motivations for getting tattooed, n (%)						
Body embellishment	5 (27.8)	3 (21.4)	2 (50)	NS		
Individuality, distinction	5 (27.8)	4 (28.6)	1 (25)	NS		
Body appropriation	3 (16.7)	3 (21.4)	0 (0)	NS		
Eroticism, sexuality	4 (22.2)	4 (28.6)	0 (0)	NS		
Commitment	0 (0)	0 (0)	0 (0)	-		
Tradition, culture	0 (0)	0 (0)	0 (0)	_		
Endurance/stamina	2 (11)	2 (14.3)	0 (0)	NS		
No reason	5 (27.8)	3 (21.4)	2 (50)	NS		
Quality of life SF-12, mean±SD Tattoo(s)	,	,	,			
Physical composite score	51.1±5.9			NS*		
Mental composite score	42.6±6.8			NS*		
No tattoes (ref)	12.0-0.0			110		
Physical composite score	55.2±6.8					
Mental composite score	41.2±10.1					
Self-reported side-effects, <i>n</i> (%)	11.2-10.1					
No	8 (44.4)	5 (35.7)	3 (75)	NS		
Yes, once	4 (22.2)	6 (42.8)	1 (25)	-		
Yes, waxing and waning	1 (5.5)	1 (7.1)	0 (0)	_		
Yes, persistent	2 (22.2)	2 (14.3)	0 (0)	_		
Healing problems	5 (50)	5 (55.5)	0 (0)	_		
Irritation	5 (50)	5 (55.5)	0 (0)	_		
Infection	2 (20)	2 (22.2)	0 (0)	_		
Itch	3 (30)	2 (22.2)	1	NS		
	2 (30)	- (22.2)		110		

^aFischer's exact test or Student's t-test.

NS: not significant.

ment of the body (50%), expression of individuality (22.7%) and reclaiming her/his own body, sexuality or no reason (13.6% each). Teenagers self-reported complications in 40.9%, mostly infection (77.8% of the complications).

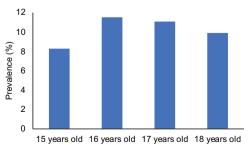


Fig. 1. Prevalence of tattoos by age in the current study.

TATTOES

Of the respondents 10.3% had tattoo(s) (girls 6.1%, boys 12.8%) (Table II, Fig. 1). Median age at tattooing was 16.5 years. Tattooed teenagers tended to smoke (27% vs 17.2%, p > 0.05). Overall, smoking prevalence by group was as follows: teenagers with only BP (50%) > both tattoo(s) and BP (42.8%) > with only tattoos (18.2%) > without any BP and tattoos (14.9%). Parents were involved in the decision in 38.9%, and family members in 33.3%. Of those with tattoos, 61.1% hesitated before their first tattoo. Only 5.6% had regrets. Motivation included embellishment of the body, individuality or no reason (27.8%), and sexuality (22.2%). Teenagers self-reported complications in 55% of cases, including healing issues and local irritation (50%) and itch (30%). Physical and mental composite score were comparable whether teenagers had BP/tattoos or none.

DISCUSSION

The prevalence of BP was lower compared with previous studies (4), while the prevalence of tattoos was rather similar to the current published data (3). Girls tended to favour BP, while boys favoured tattoos. Smoking was yet again strongly associated with BP with or without tattoos (5). Acknowledging the limits of our study (a rather small but representative sample of the general population), it provides a recently updated snapshot of French teenagers with BP and tattoos. These results will be useful for prevention and educational purposes among the public and to help parents and health professionals to better advise adolescents about the risks of tattooing and BP.

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^bTotal over 100% as respondents could give several answers.

^{*}Tattoes compared to No tattoes.