Chronic Orofacial Pain in Southern Chinese People: Experience, Associated Disability, and Help-Seeking Response

Wing S. Leung, BDS
Postgraduate Student
Oral Rehabilitation

Anne S. McMillan, BDS, PhD, FDSRCPS, FDSRCS
Professor and Chair
Oral Rehabilitation

May C. M. Wong, BSocSci, MPhil, PhD
Associate Professor
Dental Public Health

Faculty of Dentistry
University of Hong Kong
Hong Kong SAR

Correspondence to:
Professor Anne McMillan
Oral Rehabilitation
Faculty of Dentistry
University of Hong Kong
34 Hospital Road
Hong Kong SAR
Fax +852 2858 6114
E-mail: annemcmillan@hku.hk

Aims: *To investigate chronic orofacial pain experience, psychosocial impact, and help-seeking response in adult Chinese people in Hong Kong.* ***Methods:*** *A cross-sectional population-based telephone interview survey identified 1,352 randomly selected people aged ≥ 18 years. Standard questions were asked about current or episodic and prior (≥ 6 months) experience of 7 orofacial pain symptoms. Pain intensity and psychosocial impact were assessed through the Graded Chronic Pain Scale, and the help-seeking response was assessed using the 4-item Level of Expressed Need (LEN) measure.* ***Results:*** *Current or episodic symptoms of orofacial pain were reported by 57.0% of respondents, and 13.2% of this group reported symptoms that had lasted for ≥ 6 months (chronic subgroup). In the chronic subgroup, toothache was the most common symptom (42.2%) and oral sores the least common (7.8%). The mean pain intensity in the chronic pain subgroup was 46.6 (SD 21.7) with no age or gender differences (*P > .05*); 88.2% had low disability levels and 11.8% had high levels. 81.4% had low LEN scores and 18.6% had high scores, with no age/gender differences (*P > .05*).* ***Conclusion:*** *The prevalence of current/episodic orofacial pain was relatively high, whereas chronic orofacial pain was much less common. Although the intensity of chronic orofacial pain was significant, associated psychosocial disability was low, as was the level of perceived need for treatment. These findings may be related to more effective pain-coping strategies and greater acceptance of pain in this ethnic group compared to other ethnic groups.* J OROFAC PAIN 2008;22:323–330

Key words: Chinese, chronic pain, orofacial, prevalence, psychosocial, treatment-seeking

Orofacial pain comprises oral pain, which denotes pain within the mouth, and facial pain, which is defined as pain emanating from below the orbitomeatal line, anterior to the ears and above the neck.[1] Community-based studies have revealed that orofacial pain symptoms are common and affect at least a quarter of the population at any one time, with women and younger adults at greater risk of pain symptoms.[2–5] Although pain in the face and mouth may be symptomatic of a variety of disorders, most orofacial pain is due to dental causes and is generally acute rather than chronic in nature.[1] In some instances, however, orofacial pain tends to persist and is considered chronic orofacial pain.[1,6] Recent data suggest that chronic orofacial pain tends to be associated with females, the elderly, psychologic distress, widespread pain, and taking medication for pain symptoms at an early stage.[7] The elderly are considered to be particularly vulnera-

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ble to chronic pain because of age-related tissue degeneration, impaired general health, and reduced social circumstances.[8]

A systematic review of population-based orofacial pain studies disclosed that most involved Caucasian cohorts.[9] In a recent study involving elderly Koreans, the prevalence of orofacial pain appeared to be higher in this ethnic group, and significant disability was associated with chronic orofacial pain conditions, notably toothache, joint pain, and burning mouth symptoms.[8] The prevalence of orofacial pain reports in adult Chinese people in Hong Kong (1-month period prevalence 42%) was similar to prevalence estimates in Western cohorts.[4] However, the prevalence of chronic orofacial pain in Hong Kong Chinese adults is presently uncertain, although a recent community-based study suggested that it may be high in the elderly and that there is substantial associated morbidity.[10]

The help-seeking response to pain is complex. Professional treatment seeking for orofacial pain symptoms varies between ethnic groups, ranging from 40% to 46% in Western cohorts to 20% in Hong Kong Chinese people.[2,4,11] Particular features of the pain appear to be associated with treatment seeking.[11] Nonetheless, in a large community-based study, Locker and Grushka[2] noted that more than half those with moderate to severe orofacial pain did not seek professional help. The Level of Expressed Need (LEN) scale has been shown to be a valuable adjunct when exploring the help-seeking response to chronic pain in the general population.[12]

The hypotheses tested in the present study were *(1)* that chronic orofacial pain is a relatively common condition among adult Chinese people in Hong Kong, *(2)* that such chronic orofacial pain may be associated with significant disability, and *(3)* that those people experiencing chronic orofacial pain symptoms are resistant to seeking help. The study aimed to investigate *(1)* the experience of chronic orofacial pain symptoms, *(2)* pain severity and impact, and *(3)* help-seeking response for chronic orofacial pain symptoms in community-dwelling adult Hong Kong Chinese people with current or episodic orofacial pain symptoms.

Materials and Methods

The study involved a cross-sectional, population-based telephone interview survey. This method was adopted because almost all households in Hong Kong have telephones.[13] Approval was obtained from the Institutional Review Board of the University of Hong Kong/Hospital Authority (West Cluster) Hong Kong prior to commencement of the study. Verbal informed consent was obtained from participants after the study had been clearly explained.

The study was undertaken by the Telephone Survey Unit of the Social Sciences Research Centre at the University of Hong Kong. The survey took place over 5 days in August 2006. A sample of Cantonese-speaking Chinese people aged 18 years or over living in Hong Kong was generated for the survey by a random digit dialing technique. This group represents 95% of the population of Hong Kong.[14] Interviews were conducted by trained staff using a standard method. When there was more than one potential participant in a household, one of them was randomly selected to take part in the study.[15] At the end of the survey, 10% of the sample was contacted again to ensure that they had taken part and had answered the survey questions, according to the Telephone Survey Unit's standard practice.

Interviews were conducted using a Computer-Assisted Telephone Interview method and a standard sequence, namely, the research questionnaire followed by 4 sociodemographic questions (age, gender, educational level, monthly income). A Chinese questionnaire was used that was based on an orofacial pain screening measure described previously by Chung et al.[8] The questionnaire was translated into Chinese, back-translated into English, then pilot-tested on patients attending the Prince Philip Dental Hospital in Hong Kong. Patient feedback was assessed and the specific wording of the questionnaire confirmed.

Questionnaire

The questionnaire involved questions on current, episodic, or prior (≥ 6 months) experience of 7 orofacial pain symptoms, based on previous orofacial pain questionnaires by Riley and Gilbert[16] and Chung et al.[8] For example, *"Are you currently troubled by toothache, either all the time or on and off?"* If the participant responded positively, then he was asked *"Have you had this pain for at least 6 months?"* Chronic pain was determined as present if the participant responded that they had experienced at least 1 of the following symptoms for a minimum of 6 months:

1. Toothache
2. Pain in the jaw joint/s or in front of the ear/s
3. Pain in the cheeks or face

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4. Painful sore/s in the mouth or around the lips
5. Burning sensation in the tongue or other parts of the mouth
6. Pain in/around the eyes
7. Pain in/around the temples

Participants who reported chronic pain symptoms were then asked questions on pain severity and impact, help-seeking for pain, potential barriers to treatment seeking, perception of general health, and experience of widespread pain.

Pain severity and impact were explored using the Graded Chronic Pain Scale (GCPS).[6] The GCPS incorporates 7 questions related to pain intensity, pain-related disability days, and interference with daily life activities in a 6-month period. The pain graded into 4 hierarchical classes (grade I, low disability-low intensity; II, low disability-high intensity; III, high disability-moderately limiting; IV, high disability-severely limiting).

The help-seeking response to chronic orofacial pain symptoms was assessed using the LEN scale.[12] The measure incorporates 4 questions on treatment seeking and use of painkillers for pain and is classified on a 5-point hierarchical scale. Scores 0, 1, or 2 were defined as a low LEN and scores 3 or 4 indicated a high LEN.[12] The psychometric properties of the LEN have been described by Purves et al[17] and Smith et al.[12] During the development of the LEN, the internal consistency was investigated to assess the reliability of the measure and found to be good.[17] The construct validity of the LEN was assessed by investigating its correlation with the GCPS and the SF-36 General Health Questionnaire, and it demonstrated good validity.[17]

For participants with chronic orofacial pain symptoms who had not sought treatment, coded response categories were given that described 8 possible reasons for not seeking treatment: *lack of time*; *treatment is too expensive*; *frightened of or dislike the treatment*; *the pain is a minor problem therefore you do not worry about it*; *treatment is too complex and you do not want to take the trouble*; *do not think the treatment will be effective*; *difficult to seek treatment because of poor health*; *do not know where to obtain treatment*; and *other reasons*.

All participants who described chronic orofacial pain symptoms were asked to rate their general health on a 5-point Likert scale (0 = very poor to 4 = very good). In addition, they were asked whether they were bothered by widespread pain. This aspect was rated on a 5-point Likert scale (0 = not at all to 4 = an extreme amount).

The relationship between patients' current pain self-reports and objective assessment was investigated in 20 patients seeking treatment at the primary dental care unit in the Prince Philip Dental Hospital, Hong Kong. Patients completed the questions regarding pain symptoms prior to clinical assessment by a dentist not involved in the study. Patients' pain self-reports were then compared with clinical diagnostic information. There was agreement between patient-based and clinical information in terms of the type of pain symptoms.

Response Pattern

A total of 11,231 randomly generated telephone numbers were called (at least once). Of these calls, 3,347 were unregistered numbers, 490 were fax numbers, 824 were business numbers, and 2,619 calls were not answered (after at least 3 attempts). No eligible persons (ie, Cantonese-speaking Chinese people aged 18 years or over living in Hong Kong) were identified in 2,221 calls (after at least 3 attempts), 322 people refused to be interviewed, and 56 people partially completed the interview. A total of 1,352 respondents were successfully interviewed, giving a response rate of 78.2% (1,352/1,352 + 56 + 322) and an overall contact rate of 42.5% (1,352 + 56 + 322 + 2,221 + 824/11,231).

The sociodemographic characteristics of the survey sample (and corresponding 95% confidence intervals) and the general population distribution in Hong Kong[14] are shown in Table 1. Since the population values lay outside the 95% confidence intervals computed based on the study sample data, statistically there were significantly more women, fewer younger adults, fewer people with primary education or below, and more people with the lowest income level in the study sample ($P < .05$).

Data Processing and Analyses

Data processing and analyses were done using SPSS software (SPSS Inc, version 14). The prevalence of orofacial pain symptoms (current or episodic and chronic) and corresponding 95% CIs were obtained. Because of some differences in terms of sociodemographic characteristics between the survey respondents and the general population, both unweighted and weighted overall prevalence estimates were calculated. The weighted estimate was calculated by assigning weights according to the actual general population profile for gender and age.[14] χ^2 or χ^2 exact tests were used to compare the differences in the distribution of orofacial

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Table 1 Sociodemographic Data of the Survey Sample (n = 1,352)

	Survey sample (95% CI)		General population
	%	95% CI	%
Gender			
Male	40.5	37.9–43.1	47.7
Female	59.5	56.9–62.1	52.3
Age (y)			
18 to 34	27.7	25.3–30.1	33.1*
35 to 54	46.6	43.9–49.3	41.2
≥ 55	25.7	23.4–28.0	25.7
Educational attainment			
Primary and below	19.9	17.8–22.0	32.9
Secondary or above	80.1	78.0–82.2	67.1
Personal income/mo (HK $)			
0 to 9,999	58.1	55.5–60.7	47.8
10,000 to 19,999	20.1	18.0–22.2	31.3
20,000 to 39,999	11.5	9.8–13.2	14.6
≥ 40,000	3.6	2.6–4.6	6.3
Missing data	6.7	5.4–8.0	–

*For 15 to 34 years. No breakdown for 18 to 34 years was available for these data.

Table 2 Distribution (%) of Current or Episodic Orofacial Pain Symptoms by Gender and Age

		Gender			Age (y)			
Pain symptoms	% (n = 1,352)	Males (n = 548)	Females (n = 804)	*P*	18–34 (n = 375) (1)	35–54 (n = 630) (2)	≥ 55 (n = 347) (3)	*P*
Toothache (n = 371)	27.5 (25.1–29.9)	27.4	27.6	.923	21.0	27.3	35.8	.001† 1,2 < 3‡
Jaw joint pain (n = 189)	14.0 (12.2–15.8)	13.9	14.1	.923	13.2	13.8	15.1	.752
Face/cheeks (n = 82)	6.1 (4.8–7.4)	5.5	6.5	.453	4.3	6.9	6.4	.242
Oral sores (n = 143)	10.6 (9.0–12.2)	11.1	10.2	.584	5.9	11.7	13.7	.002† 1 < 2, 3‡
Burning mouth (n = 180)	13.3 (11.5–15.1)	13.1	13.4	.876	10.0	13.3	16.3	.044† 1 < 3‡
Eyes (n = 201)	14.9 (13.0–16.8)	12.8	16.4	.065	17.3	12.7	16.6	.092
Temples (n = 307)	22.7 (20.5–24.9)	16.2	27.1	< .001†	20.5	26.3	19.2	.018* 2 > 3‡
2 or more	30.2 (27.8–32.6)	29.2	30.8	.517	24.5	31.6	34.0	.013† 1 < 2, 3‡
Overall prevalence	57.0 (54.5–59.6)	51.5	60.7	.001†	54.2	57.6	59.0	.392

95% CI shown in parentheses.
†$P < .05$, independent χ^2 tests.
‡Post-hoc test results with an adjusted level of significance of .017.

symptoms according to gender and the 3 age groups. Correlation between GCPS and LEN data were analyzed using the χ^2 test to investigate the construct validity of the LEN, while the internal consistency of the LEN was investigated by computing the Cronbach's alpha coefficient. The level of significance of the above tests was set to be .05, while the level of significance of the post-hoc tests among the 3 age groups was set to be .017 (= .05/3).

Results

Prevalence of Orofacial Pain

Of the 1,352 survey respondents, 770 (unweighted prevalence, 57.0%; 95% CI, 54.3% to 59.6%) reported some form of current or episodic orofacial pain symptoms (Table 2). The weighted prevalences were 56.4% (95% CI, 53.8% to 59.1%) by

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Table 3 Distribution (%) of Chronic Orofacial Pain Symptoms in the Chronic Subgroup by Gender and Age (n = 102)

Chronic pain symptoms	% (n = 102)	Gender			Age (y)			
		Males (n = 43)	Females (n = 59)	*P*	18–34 (n = 23) (1)	35–54 (n = 49) (2)	≥ 55 (n = 30) (3)	*P*
Toothache (n = 43)	42.2 (32.6–51.8)	51.2	35.6	.116	34.8	28.6	70.0	.001* 1 = 2 < 3‡
Jaw joint pain (n = 24)	23.5 (15.3–31.7)	32.6	16.9	.006	21.7	16.3	36.7	.115
Face/cheeks (n = 11)	10.8 (4.8–16.8)	16.3	6.8	.195	0.0	8.2	23.3	.013† 1 < 3‡
Oral sores (n = 8)	7.8 (1.6–13.0)	16.3	1.7	.009†	13.0	6.1	6.7	.630
Burning mouth (n = 12)	11.8 (5.5–18.1)	11.6	11.9	.971	13.0	14.3	6.7	.618
Eyes (n = 21)	20.6 (12.8–28.4)	33.3	66.7	.358	17.4	22.4	20.0	.881
Temples (n = 42)	41.2 (31.6–50.8)	25.6	52.5	.006*	43.5	49.0	26.7	.143
2 or more	33.3 (24.2–42.4)	34.9	32.2	.777	6.9	14.7	11.8	.454

95% CI shown in parentheses.
*$P < .05$, independent χ^2 tests.
†$P < .05$, independent χ^2 exact tests.
‡Post-hoc tests result with adjusted level of significance = .017.

Table 4 Distribution (%) of Chronic Orofacial Pain Symptoms in the Chronic Subgroup According to the GCPS

Graded Chronic Pain	Toothache (n = 43)	Jaw joint pain (n = 24)	Face/cheeks (n = 11)	Oral sores (n = 8)	Burning mouth (n = 12)	Eyes (n = 21)	Temples (n = 42)	Overall (n = 102)
Low disability								
Low intensity (I)	55.8	41.7	27.3	37.5	75.0	23.8	33.3	53.9
High intensity (II)	34.9	41.7	54.5	37.5	16.7	52.4	47.6	34.3
High disability								
Moderately limiting (III)	7.0	12.4	9.1	0.0	0.0	19.0	16.7	9.8
Severely limiting (IV)	2.3	4.2	9.1	25.0	8.3	4.8	2.4	2.0

gender and age. Thus, the survey respondents' data did not appear to give rise to significant bias. There was a significantly higher prevalence of orofacial pain in women ($P = .001$). There was no age-related difference in overall pain symptom prevalence ($P = .392$). Responses to the 7 questions on orofacial pain symptoms are described in Table 2. The most common symptom was toothache (27.5%), followed by pain in and around the temples (22.7%). There was a significantly higher prevalence of toothache in the oldest (≥ 55 years) age group ($P = .001$), and pain in and around the temples was more common in women ($P < .001$). The least prevalent symptom was pain in the face and cheeks (6.1%). One third of the subjects reported pain at multiple (≥ 2) anatomic locations.

Chronic Orofacial Pain

Of the 770 participants who described current or episodic orofacial pain symptoms, 102 (unweighted proportion, 13.2%; 95% CI, 10.8% to 15.6%) reported that the symptoms had lasted for at least 6 months. The weighted estimate for this chronic pain subgroup was 13.5% (95% CI, 11.1% to 15.9%) by gender and age. There were no gender or age-related differences in chronic pain experience among participants who reported current or episodic orofacial pain symptoms ($P = .213$ and $P = .602$, respectively). The distribution of chronic orofacial pain symptoms among participants with current or episodic pain is shown in Table 3. Among the chronic subgroup, toothache (42.2%) and pain in and around the temples (41.2%) were the most commonly reported symptoms, whereas oral sores (7.8%) were least often reported. Toothache and pain in and around the face and cheeks were significantly more common in the oldest age group ($P < .017$). Multiple symptoms (≤ 2) occurred in a third (33.3%) of people with chronic pain. When the experience of chronic orofacial pain by symptom was computed, cheek/face pain was the most frequently reported chronic symptom (13.4%) whereas oral sores was the least common (5.6%).

Graded Chronic Pain

The mean pain intensity for subjects with chronic orofacial pain symptoms (n = 102) was 46.6 (SD 21.7) with no gender or age-related differences in intensity ($P = .882$ and $P = .210$, respectively). The percentage distribution of the GCPS within each of

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Table 5 Distribution (%) of Chronic Orofacial Pain Symptoms in the Chronic Subgroup According to the LEN Scale

Level of Expressed Need (%)	Toothache (n = 43)	Jaw joint pain (n = 24)	Face/cheeks (n = 11)	Oral sores (n = 8)	Burning mouth (n = 12)	Eyes (n = 21)	Temples (n = 42)	Overall (n = 102)
Low (levels 0–2)	83.7	75.0	81.8	75.0	66.7	71.4	73.8	81.4
High (levels 3–4)	16.3	25.0	18.2	25.0	33.3	28.6	26.2	18.6

the 7 orofacial pain symptoms is shown in Table 4. The majority of those in the chronic pain subgroup were rated as low disability (88.2%). The overall percentage of participants with high disability (grades III and IV) was 11.8%. Two of those reporting (25%) the oral sores had high disability whereas only 1 (8.3%) with burning mouth had high disability.

Level of Expressed Need

The distribution of chronic orofacial pain symptoms according to the LEN scale is shown in Table 5. In this chronic pain subgroup, the majority had low LEN scores (81.4%). Four subjects (33.3%) with burning mouth symptoms had high LEN scores, whereas high scores were least common in those with toothache. When the high and low LEN groups were compared with high- and low-disability GCPS groups, 7 of 12 subjects (58.3%) rated as high disability also had a high LEN score, but only 13.3% of individuals with low disability had high LEN scores. The difference was statistically significant ($P = .001$). The results support the construct validity of the LEN that people with high disability (using GCPS) had a higher level of expressed need as revealed by the LEN score. The Cronbach's α coefficient was 0.69, which supports the internal consistency of the LEN.

Treatment-Seeking Response

Thirty-five (34.3%) people in the chronic pain subgroup had sought treatment recently, 28 (27.5%) had sought treatment at some time previously, and 39 (38.2%) had never sought treatment for the pain symptoms. The most common reasons for not seeking treatment were "treatment too expensive" (35.7%), "the pain is a minor problem therefore I do not worry about it" (39.3%), and "I do not think that the treatment will be effective" (28.6%). Among those who had not sought treatment, 5 (12.8%) were rated as high disability using the GCPS. Fifty-one (50.0%) people with chronic pain symptoms had used medication for pain.

The majority of subjects in the chronic orofacial pain subgroup rated their overall health as fair (64.7%), good (15.7%), or very good (3.9%), whereas only 11.8% described it as poor and 3.9% as very poor. Approximately half of those with chronic pain symptoms described little (32.4%) or no (22.5%) pain in other parts of the body, whereas 31.4% described a moderate amount, 12.7% had quite a lot, and 1% an extreme amount of widespread pain.

Discussion

This population-based survey described chronic pain experience and related disability and help-seeking behavior in adult Chinese people in Hong Kong who were experiencing current or episodic orofacial pain symptoms and provides some of the first insights into chronic orofacial pain and impact in this ethnic group. As there was some variation in the profile of the surveyed subjects compared with the general population, the unweighted and weighted prevalence estimates were computed and found to be very close. Thus, no significant bias appeared to have been induced by differences between the respondents and the population as a whole. Although the survey response rate (78.2%) and contact rate (42.5%) were reasonable, they were lower than in previous telephone-based surveys of orofacial pain symptoms in Canada, Finland, Hong Kong, and the United States.[4,15,18–20] Thus, self-selection bias should be considered a potential confounding factor in this survey. It should also be noted that no clinical assessment or face-to-face interviews took place; therefore, it is possible that on some occasions the pain symptoms reported by respondents were misconstrued. However, Lam et al[21] described highly correlated outcomes in a comparison of health and illness data obtained by face-to-face and telephone interviews as part of a general household survey in Hong Kong.

Fifty-seven percent of the survey sample had current or episodic orofacial pain symptoms at the time of the study. This estimate is higher than other population-based orofacial pain estimates in Canada, the United States, the United Kingdom, and Hong Kong, which ranged from 17% to

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53%.[2,3,16,22] However, previous estimates have indicated the period prevalence, mainly over a 4-week period, whereas for the present data the reference period was not specified. Therefore, data could not be directly compared. It is possible that current or episodic pain reports were overestimated because positive self-reports were not differentiated on the basis of frequency.[18] Thus, there was the attendant risk of overestimating the prevalence of clinically meaningful symptoms, a problem commonly associated with pain surveys.[18]

In those experiencing current or episodic orofacial pain at the time of the survey, the distribution of symptoms that had lasted for 6 months or more was quite low (13.3%) and supports the consensus view that chronic orofacial pain is much less common than the acute condition.[1] A previous study in elderly Hong Kong Chinese people had suggested that prevalence of chronic orofacial pain was common (80%).[10] However, this study was done in a convenience sample and the 3-month period prevalence was estimated;[10] therefore, the data were not directly comparable.

No overall gender difference in chronic pain symptom experience was observed in those people reporting current or episodic orofacial pain symptoms, although pain around the temples was more common in women and oral sores more common in men. This finding is at variance with data derived from community-based adults in the United Kingdom and elderly Koreans where pain symptoms were generally more common in women.[7,8] However, the present data reflect the gender distribution within only a subgroup of the population and may not necessarily be indicative of the population as a whole. Nonetheless, a previous population-based survey in adult Hong Kong Chinese people revealed no overall gender difference in orofacial pain prevalence over a 4-week period.[4] Chronic toothache and face/cheek pain were more common in the elderly, although overall there were no age-related differences in the chronic pain subgroup. The present age-related findings support, at least in part, previous observations that chronic orofacial pain is more common in the elderly.[7] The experience of multiple orofacial pain symptoms and widespread pain was common in those with chronic orofacial pain symptoms, as expected.[7,13]

The characteristic mean pain intensity in the chronic orofacial pain subgroup was significant (46.6) and very similar to the pain intensity described in elderly Koreans with chronic orofacial pain.[8] It also mirrored the pain intensity described in North American, Swedish, and Hong Kong Chinese people seeking treatment for temporomandibular disorders (TMD), a common chronic orofacial pain condition.[23,24]

The impact of chronic orofacial pain symptoms was assessed using the GCPS, which is an indicator of the extent to which pain is psychosocially disabling.[6,25] Psychosocial dysfunction was disclosed in 11.8% of those with chronic orofacial pain symptoms, indicating that the majority of those with chronic orofacial pain symptoms had only limited associated disability. The percentage of people rated as "high disability" was considerably less than that described among elderly Koreans with chronic orofacial pain (34.1% to 49.1%, Chung et al[8]), although the differing age ranges of the study samples should be taken into account. However, the levels of psychosocial dysfunction for the Hong Kong group as a whole and also for the subgroup with TMD symptoms (16.6%) were similar to the levels of high disability (grades III and IV) observed in North American, Swedish, and Hong Kong Chinese people with TMD (13% to 20%).[23,24] Thus, findings reported here in Hong Kong Chinese adults with chronic orofacial pain symptoms do not support the contention by Chung et al[8] that elderly Koreans may express emotional distress and disability more easily than their Western counterparts.

The help-seeking response to chronic orofacial pain symptoms was explored using the LEN scale, a measure of help-seeking behavior for chronic pain in the general population.[12] The majority of people with chronic orofacial pain symptoms, including a significant number of those with high disability levels based on the GCPS, had low scores, indicating a low level of expressed need. This finding may explain, at least in part, why a significant number (38.2%) had never sought treatment. However, treatment seeking for orofacial pain symptoms has been shown to be generally low, especially in Hong Kong Chinese people, although pain is closely associated with poor health and may substantially impair quality of life.[4,11,26,27] This notwithstanding, self-medication was common in those with chronic orofacial pain and was similar to the pain medication usage described by Macfarlane et al.[7] It is also relevant that the pain medication usage was significantly higher than that described previously in Hong Kong adults with more transient orofacial pain symptoms (12%).[4]

When exploring potential barriers to treatment seeking, the characteristics of the pain, the social and psychological consequences, and access to and availability of affordable care are major factors to

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be considered.[3,27,28] It was clear that, in some instances, the cost of treatment was an impediment to treatment seeking for chronic orofacial pain symptoms. In this regard, it is pertinent that dental care for Hong Kong people is provided mainly by dentists in private practice on a fee-for-service basis; third-party payment schemes are uncommon.[29] It was also notable that although the intensity of the chronic orofacial pain symptoms was similar to that described in other ethnic groups, 39% of the Hong Kong group described the pain as a minor problem that did not worry them. [23,24] This observation suggests that Hong Kong people may have more effective pain-coping strategies and greater acceptance of pain than other ethnic groups. This finding supports previous evidence of ethnic differences in pain coping.[30,31]

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