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Unmet Needs for Mental Health Care and Its Implication for Health Education in Canada*

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Abstract

Ⅰ. Introduction

Unmet needs in mental health are one important measure of health care. In Canada where access to health care is universally covered, unmet needs may provide information on existing gaps in the health care delivery system. As psychiatric hospitals have largely been replaced in the country with a community-based approach to care(Canadian Mental Health Association 2004), most unmet needs that people experience take place in community settings. This problem of unmet needs for mental health care is not limited to those persons who are receiving care within the confines of an institutional setting. Thus, in Canada, self-perceived unmet needs of people who reside in communities will be a test of how the health care system addresses mental health issues. That is, the research on unmet needs of the general population is particularly important because it provides a sound indicator of the comprehensiveness of health care. By reaching past a narrow focus on unmet needs for those persons assessed as having a mental disorder and as not having used services(Andrade et al., 2000; Kessler et al., 2001; Demyttenaere et al., 2004) this research on unmet mental health needs focuses on another dimension: subjective

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assessment of unmet needs.[1] This new dimension helps overcome limitations of the previous unmet needs research based on the utilization model. That is, the existing definition of unmet needs as untreated disorder cannot explain the following aspects of unmet needs: 1) Individuals, despite their not being diagnosed with any mental disorder, who still feel their mental health care needs are unmet(individuals with sub-threshold cases or types of disorders not captured by current diagnostic assessments); 2) Individuals, despite their using professional services, who still feel unmet needs(unmet needs due to unsatisfactory services); 3) individuals who do not use professional services but do not experience subjective unmet needs either(their needs may be self-managed, or treated by alternative resources).

Also, the new definition of unmet needs based on the self-report model can provide a population perspective on how unmet needs should be addressed. There is an ongoing debate in Canada as to whether the entry door to mental health should be through the primary care system of physicians based in clinics and hospitals or through more specialized agencies comprised mainly of psychologists, social workers and nurses who have specialized in mental health. The 'commanding post' in health care long held by the medical profession is being challenged by other professionals(Coburn and Eakin, 1993). The mounting evidence that issues of a variety of social and behavioral conditions have a strong association with positive mental health means that other professions as well as the lay public are as critical to health care as the medical profession. Thus, in investigating unmet needs within the larger population context shifts the focus to a population perspective rather than a service provider perspective(Reed et al., 2003). Information based on the self-report model reflects individual interpretations of broader social conditions.

Figure 1 demonstrates that when a self-report model is used a broader spectrum of unmet needs is captured than from the utilization model. Clearly, the self-report model covers more diverse aspects of unmet need situations than the utilization model does. Also, the self-report model illustrates that unmet needs for mental health care do occur for individuals regardless of prevalence of mental disorder or service utilization. In fact, based on our data, more than 10% of individuals who had no disorder and yet used services, and almost 30% of individuals who had disorder and used services expressed that they experienced unmet needs for mental health care(data not shown). This finding has

1) In general, subjective(self-rated)health indicators have been found to be a reliable and valid measure(Martikainen et al., 1999; Bailis, Segallan Chipperfiel, 2003).

Mental disorder	Service use	Unmet needs reported
Yes	Yes	Yes
		No
	No	Yes
		No
No	Yes	Yes
		No
	No	Yes
		No

Figure 1. Cases of unmet needs captured by utilization model and self-report model
Utilization model Self-report model

implications for addressing issues related to unmet need. For example, mere interventions to treat disorder or to promote service use may not create an effective solution because there still remain unfixed unmet needs among individuals with no disorder and among service users. In contrast, what may be a more meaningful strategy is an approach to be inclusive of all individuals with potential unmet needs for mental health care, such as health education of the public.

In the analysis of unmet needs, various individual and environmental variables should be considered(Gold, 1998; Katz et al., 1998; Lin and Parikh, 2001). This means that broader social issues that determine health status are crucial to understand(Health Canada, 1994; Millar and Hull, 1997; Raphael, 2004). Health education emerges as a key component of system level efforts to address unmet mental health needs. Previous research often included social support as a proxy variable for proper education and information to individuals (Statistics Canada, 2003). However, specific associations between health education and mental health, the issue of unmet needs, in particular, have been seldom studied. Also, the potential role of education in mental health has not been emphasized in policy or practice whereas education has been a key strategy for general health promotion.

This study has three goals: first, it aims

to profile the state of unmet needs for mental health care in Canada; second, it investigates factors to determine a person's unmet needs by conducting a multivariate logistic regression analysis; and third and finally, it discusses potential roles of health education in addressing the issue of unmet needs for mental health care, based on findings of the current study.

Ⅱ. Methods

1. Data

The data used for this analysis are from the Canadian Community Health Survey(CCHS) cycle 1.2: Mental Health and Well-being, which began in May 2002 and was conducted over eight months to cover the entire Canada excluding territories(Statistics Canada, 2003). The sample was selected using the area frame designed for the Canadian Labour Force Survey(LFS).[2] A multi-stage stratified cluster design was used to sample dwellings within this area frame. One-person, aged 15 or older was randomly selected from the sampled households. Individual respondents were selected to over-represent young people(15 to 24) and seniors(65 or older), thus ensuring adequate sample sizes for these age groups. All interviews were conducted using a computer-assisted application. The majority(86%) were conducted in person; the remainder, by telephone. Selected respondents were required to provide their own information as proxy responses were not accepted. The sample size was 36,984(16,773 men and 20,211 women). We have extracted data of about 30 relevant variables from the raw data of the CCHS 1.2. and constructed a dataset for this study. Table 1 presents sample size and weighted distribution of selected characteristics. More detailed descriptions of the design, sample and interview procedures can be found in other reports(Béland et al., 2001; Béland, 2002).

2. Measures

1) Unmet needs for mental health care

The Canadian Community Health Survey-cycle 1.2: Mental Health and Well-being measures unmet mental health care needs by asking "During the past 12 months, was there ever a time when you felt that you needed help for your emotions, mental health or use of alcohol or drugs, but you didn't receive it?" Those who responded in the affirmative were asked then to respond to a second question: "Why didn't you get this help?" The

2) The LFS uses a probability sample that is based on a stratified multi-stage design. Each province is divided into large geographic stratum. The first stage of sampling consists of selecting smaller geographic areas, called clusters, from within each stratum. The second stage of sampling consists of selecting dwellings from within each selected cluster(Statistics Canada 2005).

Table 1. Distribution of selected characteristics, household population aged 15 or older, Canada excluding territories, 2002

		Estimated population	
	Sample size	'000	%
Total	36,984	24,996	100.0
Sex			
Male	16,773	12,286	49.2
Female	20,211	12,710	50.9
Age			
15-24	5,673	4,136	16.6
25-44	12,813	9,507	38.0
45-64	10,762	7,626	30.5
65+	7,736	3,726	14.9
Household income			
Low/lower-middle	4,954	2,299	9.2
Middle	8,081	4,738	19.0
Upper-middle/high	20,499	15,583	62.3
Missing	3,450	2,377	9.5
Chronic conditions			
None	14,946	11,300	45.2
One or more	21,999	13,669	54.7
Missing	39	28	0.1
Self-perceived mental health			
Positive	33,991	23,268	93.1
Negative	2,969	1,715	6.9
Missing	24	13	0.1
Mental disorder			
One disorder	3,033	2,014	8.1
More than one disorders	1,101	645	2.6
No disorder	31,503	21,539	86.2
Missing	1,347	799	3.2
Illicit drug use			
Yes	4,525	3,154	12.6
No	32,371	21,778	87.1
Missing	88	65	0.3
Mental health service use			
Yes	3,892	2,382	9.5
No	32,877	22,483	89.9
Missing	215	132	0.5

Data source: 2002 Canadian Community Health Survey Cycle 1.2
Notes: Because of rounding, detail may not add to totals.

reasons were classified as follows: 1) preferred to manage oneself; 2) didn't think anything more could help; 3) didn't know how or where to get help; 4) afraid to ask for help or of what others would think; 5) couldn't afford to pay; 6) problems with transportation, childcare or scheduling; 7) professional help not available - in the area; 8) professional help not available - at time required; 9) waiting time too long; 10) didn't get around to it / didn't bother; 11) language problems; 12) personal or family responsibilities; 13) other. These reasons were classified into three indicators of unmet needs: barriers to *accessibility*(cost, transportation, competing responsibilities and language problem), *acceptability*(attitudes towards illness, health care providers or the health care system) and *availability*(service unavailability)(for specific items of three categories, see Table 2).

2) Mental disorder

Following the World Health Organization (WHO) Composite International Diagnostic Interview(CIDI), the CCHS 1.2 assessed disorders. The survey collected information on prevalence of five mental disorders and two dependences in the 12 months prior to the interview.[3] Disorders considered were major depressive disorder, mania disorder, panic disorder, social anxiety disorder, agoraphobia, alcohol dependence, and illicit drug dependence. Disorders were assessed using the definitions and criteria of the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition(DSM-IV)(APA, 2000). For this study, respondents were classified into three groups: individuals with one disorder, multiple disorders, or no disorder.

3) Mental health service use

Twelve-month service use was assessed by asking respondents if they ever used resources for problems concerning emotions, mental health or use of alcohol or drugs in the 12 months prior to the interview. Specifically, it assessed whether the respondent was ever hospitalized overnight or ever consulted a professional, used internet support group or chat room, went to a self-help group or used a telephone helpline in the 12 months prior to the interview. Included types of professionals were mental health professionals(e.g., psychiatrist, psychologist); general medical professionals (e.g., family doctor, general practitioner, other medical doctor, nurse); social worker, counsellor or psychotherapist; religious or spiritual counsellor; and other professionals. For this study, if a respondent used at least one resource for mental health issues in the

3) For more detailed information, see Statistics Canada 2004. "Definitions of mental disorders in the Canadian Community Health Survey Mental Health and Well-being"

12 months prior to the interview, the respondent was considered as a service user.

4) Negative self-perceived mental health

The following question was used to determine the respondent's state of self-perceived mental health: "In general, would you say your mental health is: excellent? very good? good? fair? poor?" In this study, if respondents answered fair or poor, they were considered to have negative self-perceived mental health.

5) Emotional or informational support

Emotional or information support measured whether the respondent has someone to listen and advise in a crisis, someone to give information and confide in and talk to, or someone to understand problems. It is a continuous variable with its score ranging 0 to 16. Higher scores indicate more perceived emotional or informational support.

6) Chronic conditions

Measures of chronic conditions were based on a question asking whether respondents had long-term conditions that had lasted or were expected to last six months or longer and that had been diagnosed by a health care professional. Interviewers read a list of conditions and respondents who answered positively to at least one of the eighteen chronic conditions considered in this analysis were classified as suffering from a chronic condition. The eighteen conditions considered were: asthma, fibromyalgia, arthritis or rheumatism, back problems, high blood pressure, migraine, chronic bronchitis, emphysema, diabetes, epilepsy, heart disease, cancer, ulcers, the effects of a stroke, bowel disorder, thyroid disorder, chronic fatigue syndrome and multiple chemical sensitivities.

7) Illicit drug use

Illicit drug use measured the respondent's use of any illicit drug in the past 12 months. Illicit drugs included cannabis, amphetamine, ecstasy -MDMA-, hallucinogens, PCP or LSD, glue, gasoline, or other solvent, heroin, and steroid.

8) Other variables

The analysis also included socio-demographic variables(age, sex, income, education, race, language, marital status, place of residence, and living in north), other social support variables(community belonging, tangible support, affection, and positive social interaction) and another health behaviour variable(heavy drinking).

2. Analysis Procedures

Weighted cross-tabulations were used to profile unmet needs for mental health care in Canada. Multivariate logistic regression

analysis was used to investigate associations between unmet needs for mental health care, and health conditions, some health behavior and social support factors while controlling for other confounding variables. To be more specific, dependent variable is unmet needs for mental health care(dichotomous variable with two values - yes or no); and main independent variables include sex, age, emotional or informational support, chronic condition, negative self-perceived mental health, mental disorder, mental health service use and illicit drug use. To account for survey design effects, the variance used in the calculation of coefficients of variation and confidence limits was estimated with the bootstrap technique(Rao et al., 1992; Rust and Rao, 1996; Yeo et al., 1999).

Ⅲ. Results

1. Profile of unmet needs for mental health care

Figure 2 illustrates the percentage of unmet needs for mental health care in 2002. Four and a half percent of the total population reported unmet needs. Both for men and women, there were clear age differences: people tended to have less unmet need problem for mental health care as they aged. The youngest age group appeared to have the highest rate of self-reported unmet needs. For example, more than one out of ten women

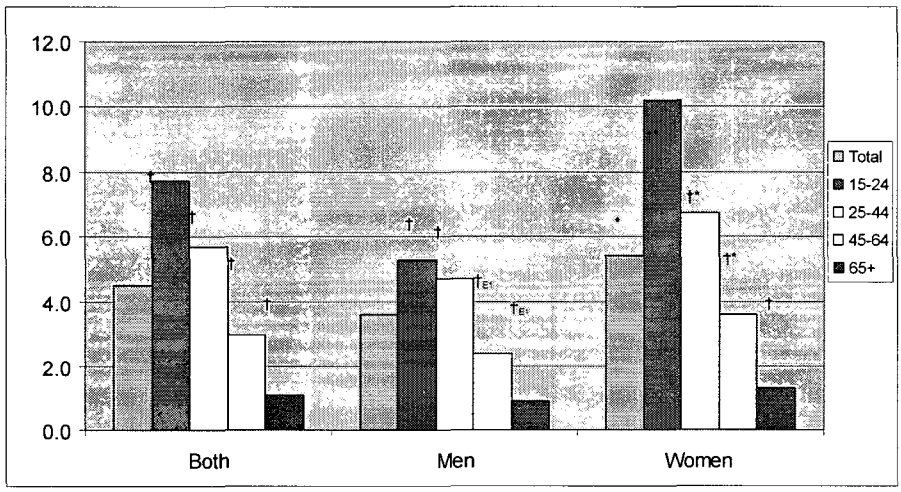

Figure 2. Percentage of unmet needs for mental health care by age group (%), household population, aged 15+, Canada, 2002

Data source: 2002 Canadian Community Health Survey Cycle 1.2
† Significantly different from total ($p<0.05$)
* Significantly different from men ($p<0.05$)
E1 Coefficient of variation between 16.6% and 25.0

aged 15-24 experienced unmet needs for mental health care in 2002. These age differences tended to stay significant after controlling many confounding factors in the regression analysis(Table 3).

Also, for most age groups, women seemed to have higher unmet needs than men did. There was no statistically meaningful gender difference in people aged 65 or older. There may be some leveling effect in the mental health status of seniors. Again, the logistic regression analysis confirmed overall gender difference. Compared to men, women had 1.6 times higher odds of having experienced unmet needs for mental health care in 2002 (Table 3).

2. Acceptability, accessibility and availability

As Figure 3 shows, for both men and women, barriers to acceptability were the most frequently indicated reason for perceived unmet needs for mental health care. For more than 80 percent of respondents who reported unmet needs, acceptability was responded as a reason. About 20 percent reported accessibility and/or availability as a reason for unmet needs. Table 2 provides more detailed information of reasons for unmet needs. The biggest reason for reporting unmet needs overall was "preferred to manage oneself" with 39%. The next important reasons included "didn't get around it/didn't bother", "didn't know where to go", "afraid to ask help" and "didn't think anything more could help." All of them were indicators related to acceptability issues. Among barriers to accessibility, "couldn't afford" was the most frequent response while respondents most often mentioned "professional unavailable when required" as a reason for a barrier to availability.

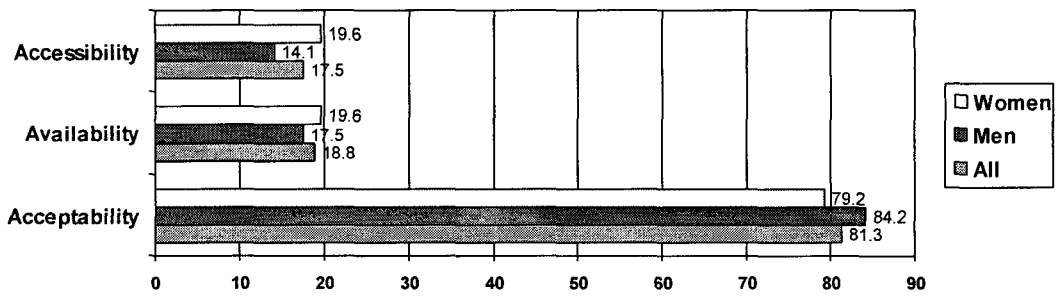

Figure 3. Three reasons for unmet mental health care needs (%), household population aged 15 or older who reported unmet needs, Canada, 2002†

Data source: 2002 Canadian Community Health Survey Cycle 1.2
† Because respondents could report more than one reason, detail adds to more than total.

Table 2. Percentage distribution of reasons for unmet mental health care needs, household population, aged 15+ with unmet needs, Canada, 2002†

	Percentage	
Acceptability	**81.3**	
Preferred to manage oneself	38.6	
Didn't think anything more could help	10.7	
Didn't know how or where to get help	17.1	
Afraid to ask for help or of what others would think	16.9	
Didn't get around to it / didn't bother	20.8	
Availability	**18.7**	
Professional help not available - in the area	6.2	
Professional help not available - at time required	8.6	
Waiting time too long	6.9	
Accessibility	**17.4**	
Couldn't afford	11.3	
Problems with transportation, childcare or scheduling	4.8	
Language problems	F	
Personal or family responsibilities	5.1	E1

Data source: 2002 Canadian Community Health Survey Cycle 1.2
† Because respondents could report more than one reason, detail adds to more than total.
* Significantly different from reference group ($p<0.05$)
E1. Coefficient of variation between 16.6% and 25.0%.
F Coefficient of variation greater than 33.3%.

3. Health conditions and unmet needs

Results of the logistic regression(Table 3) show effects of health conditions on unmet needs. Not surprisingly, the prevalence of mental disorder had highly positive associations with self-reported unmet needs. Especially, co-morbid mental disorder was associated considerably with increased odds of unmet needs for mental health care. Men with multiple disorders showed 9 times the chance of reporting unmet needs than men with no disorder. Similarly, negative self-rated mental health and prevalence of chronic conditions were consistently related to unmet needs. Poor mental and physical health was associated chances of experiencing unmet needs for mental health care.

4. High unmet needs among users of mental health service and of illicit drug

Interestingly, users of mental health services reported higher unmet needs for mental health care. For both men and women, users were about 2.5 times more likely to report unmet needs than non users(Table 3). Evidently, unmet needs are not just a problem of untreated disorder. Higher unmet needs and illicit drug use had a consistent association. Men and women who used illicit drug in 2002 perceived unmet needs 1.7 times more than

Table 3. Odds Ratios of Unmet Mental Health Care Needs by Selected Characteristics, 2002, Men and Women Aged 15 or Older, Canada

Selected characteristics	Adjusted Odds Ratio	95% Confidence Interval		Adjusted Odds Ratio	95% Confidence Interval		Adjusted Odds Ratio	95% Confidence Interval	
Sex				...	...	...	...	...	...
Female	1.58**	1.32	1.89	...	...	...	...	...	...
Male†	1.00	...	...	...	...	...	...	...	...
Age									
15-24	2.94**	2.14	4.03	3.45**	1.97	6.03	2.76**	1.91	3.99
25-44	2.03**	1.61	2.57	2.32**	1.52	3.54	1.92**	1.47	2.52
45-64†	1.00	...	...	1.00	...	...	1.00	...	...
65+	0.43**	0.31	0.62	0.41**	0.22	0.76	0.45**	0.29	0.69
Emotional or informational support	0.93**	0.90	0.95	0.90**	0.87	0.94	0.94**	0.92	0.97
Chronic conditions	1.43**	1.18	1.73	1.64**	1.24	2.16	1.30*	1.01	1.68
Negative self-perceived mental health	2.33**	1.86	2.92	2.51**	1.69	3.71	2.19**	1.68	2.87
Mental disorder									
One disorder	3.38**	2.76	4.14	3.89**	2.74	5.51	3.12**	2.42	4.01
Multiple disorders	5.78**	4.14	8.06	8.81**	5.00	15.53	4.26**	2.95	6.16
No disorder†	1.00	...	...	1.00	...	...	1.00	...	...
Mental health service use	2.51**	2.04	3.09	2.51**	1.68	3.74	2.53**	2.00	3.21
Illicit drug use	1.70**	1.35	2.14	1.87**	1.35	2.59	1.51**	1.13	2.02
Model information									
Sample size	35391			16001			19390		
Records dropped because of missing values	1593			772			821		

Data source: 2002 Canadian Community Health Survey Cycle 1.2

Notes: Controlled variables are household income, education level, marital status, race, language, residence, living in north, heavy drinking, and other social support variables (community belonging, tangible support, affection, and positive social interaction).

† Reference category

* $p<0.05$

** $p<0.01$

... Not applicable

non drug users in the same year. This may mean that some individuals relied on drugs to address their unmet mental health issues.

5. Protecting effects of emotional support

Both for men and women, the level of emotional or informational support was negatively associated with unmet needs.

Individuals with high resources of emotional or informational support tended to have lower chance of experiencing unmet mental health care needs(Table 3). It could mean that emotional support have important protecting and preventing effects on unmet needs.

Ⅳ. Discussion

This research shows that the issue of unmet needs for mental health care was most serious among the youth and women. Previous research confirms the general direction of our findings that youth and women are more vulnerable to unmet mental health needs(Baruch et al., 1998; Kessler et al., 2001). Future research initiatives should encourage a more in depth investigation of why young adults appear to have more unmet mental health care needs. Given the chronic nature of mental health conditions, it is disturbing to see that youth are more impacted than older adults.

Our finding on the effect of social support seems consistent with previous research. Social support mechanisms have long been thought to play an important role in people's sense of health and well-being(Gottlieb, 1976; Warren, 1981; House et al., 1988; Corin, 1994). Our research specifically shows that social supports may be a mediating factor in preventing and coping with unmet mental health care needs.

This research also reveals a lack of connection between unmet needs, and prevalence of mental disorders and service use. Unmet needs were reported not only by individuals with untreated disorders, but also by individuals with sub-threshold conditions and more often by those who sought some treatment for their problems(Table 3). This indicates a number of complex issues. First, for those who still report unmet needs even when they do not have a disorder, this indicates that the definition of mental disorders may not be inclusive enough or sensitive enough to pick up the broader range of unmet needs. Hence, persons still report unmet needs when they are not deemed to have a mental disorder. Secondly, for those who have sought services, the fact that unmet needs are still being reported may indicate a lack of appropriate assessment between people's mental health needs and the type of services provided to them. An alternate possible explanation is that services simply are not appropriate for meeting people's unmet mental health needs.

Ⅴ. Implications for Health Education

Findings of this research have important implications for addressing the unmet need problem. That is, merely reducing prevalence

of serious mental disorder or promoting service use may not create an effective solution because there still remain unfixed unmet needs among individuals with no disorder and service users. These findings present a compelling reason for shifting the focus to health education. It may be a more meaningful strategy because education is inclusive of all individuals with potential mental health unmet needs, not just those diagnosed with a mental disorder.

1. Acceptability gap

Results of the current study reveal that acceptability barriers comprised the most frequent reasons why people still have unmet needs. As accessibility and availability were not the primary contributors to the frequency of reporting of unmet mental health needs, any initiatives that aim to decrease unmet needs merely by enhancing mental health care services may have little effect. However, this doesn't mean that availability and accessibility issues have been resolved altogether in Canada. Eleven percent of those who reported unmet needs said that they could not afford the service and 9% mentioned unavailability of professionals as a reason for unmet needs(Table 2).

The acceptability gap cannot be narrowed only through simply increasing clinical services. Acceptability issues such as "preferred to manage oneself", "didn't get around it/didn't bother", "didn't think anything more could help", "didn't know where to go" and "afraid to ask help" would either directly or indirectly reflect at least one of the following: general lack of information, misunderstanding of mental health problems, distrust of professional services, inappropriate services and effects of social stigma. The best way to address these would include providing proper information, building trusting relationship between patients and mental health professions, overcoming societal prejudice towards those with mental disorders through education. Especially recommended is a multi-level approach of health education including individual-, environmental-, and professional-level education strategies (Corrigan and Penn, 1999; Standing Senate Committee on Social Affairs, Science and Technology, 2004;).

2. Individual-level mental health education

First, at the individual level, the public should be able to obtain better information. Most public health education tends to focus mostly on physical health and related health behaviors like diet and physical exercise. More information on mental disorders, preventive behaviors and treatment strategies need to be publicly available. Above all, individuals should be assured that they could get help for their mental health concerns. Our regression findings showed a decrease in

unmet needs when there was a higher emotional and informational support represented by to have someone to listen to and advise, to give information, to confide in, to talk to and to understand one's problems(Table 3). These types of social supports signify available sources of mental health education at the individual level.

3. Environmental-level mental health education

Second, we need better mental health education programs at the environmental level. This includes making better information available for families, neighborhoods, communities and society in general. Enhanced knowledge at the individual level may not be enough to overcome social stigma of mental disorder and negative stereotypes of individuals with mental disorder. Only when appropriate information is shared at the environmental level, social stigma toward mental problems can be fixed and reduced. This seems especially important among the youth. Our results shows that persons aged 15-24 were significantly more likely to have unmet needs than older age groups. Young individuals with mental problems could be easy victims of social stigma as youngsters are most affected by their environment(their peers, in particular)(U.S. Department of Health and Human Services, 2001). Also, stigmatization of mental health has a discouraging effect on seeking treatment(Sussman et al., 1987; Cooper-Patrick et al., 1997; Wagenaar et al., 2002; Wrigley et al., 2005). Education and dissemination of relevant health information to the youth, their peers, families, and communities should start from early stages of lifetime and of the onset of disease. This strategy can reduce unmet needs considerably and prevent more serious mental disorders. As our regression results show, illicit drug use consistently had a positive association with unmet needs for mental health care(Table 3). To individuals with unmet needs, especially young people, such lifestyle choices may be the only ways to deal with their problems. It is quite possible that many young people use illicit drugs to cope with their psychological unmet needs and related social stigma.

4. Professional-level mental health education

Third, to optimize effects of mental health education, it is necessary to improve training of the professional. The nature of professional education based entirely on bio-medical science may be associated in part with the lay people's distrusting attitude towards professional care and unconditional preference of self-care. Furthermore, it has been pointed out that mental health care providers and addiction workers themselves

are not immune from the influence of stigmatization of their patients/clients (Standing Senate Committee on Social Affairs, Science and Technology 2004). It is recommended that mental health professionals be trained with more informal values and cultural contexts of the patient. This will help build trusting relationship between patients and professionals. High levels of unmet needs among users of professional services(as shown in Table 3) may indicate the very need of improvement in the patient-profession relationship as well as the quality of care. When many people used the services, they became more aware that their mental health care needs were not met due to dissatisfaction with the professionals as well as limited quality of services. Service users have to face problems not only of their mental health but also of interactions with the medical and mental health professionals.

These three levels of mental health education will be most effective when they are being utilized together: 1) valid and useful mental health information is available to every individual; 2) families, neighborhoods and communities learn and share the knowledge of mental health issues to overcome social stigma of mental disorders; and 3) mental health professionals are trained with more socially and culturally relevant approaches of care. Then, mental health education can have a synergistic effect on reducing unmet needs of mental health care.

An important area of future research would be to evaluate the effectiveness of a three pronged approach to public education as recommended here. It is worth investigating to what extent the three levels of mental health education can reduce unmet needs for mental health care.

Ⅵ. Limitations

The data used to examine unmet needs has some limitations. First of all, the self-reporting nature of the information should be considered in interpretation. Thus, it may not provide an objective indicator of situations where the respondent has barriers to accessibility, availability, and acceptability of mental health care. Rather, unmet mental health care need would tell us self-perceived barriers.

The CCHS data is cross-sectional, and the causality of associations observed between variables should be interpreted with caution. For example, the association between the co-morbidity of mental disorder and unmet needs does not necessarily mean that more mental health problems lead to greater chances of unmet needs. It can also mean that people have more disorders because their mental health care needs are not met.

Also, the information on mental disorder

provided by the CCHS was limited as the survey only measured prevalence of five mental disorders and two substance dependences. In addition, it was not possible to determine the severity of the included disorders based on the CCHS data.

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ABSTRACT

Objectives: Individuals' self-reported unmet needs are an important indicator of heath care of their society. Using data from the Canadian Community Health Survey (CCHS) Cycle 1.2, we examine unmet needs for mental health care in Canada and discuss its implications to health education.

Results: The most frequently reported reason for unmet needs was barriers to acceptability issues, which stem primarily from lack of knowledge of mental health, negative attitudes towards mental disorder, and mistrust of mental health professionals. Unmet needs for mental health care appeared an especially serious issue among the young. Also, individuals who reported unmet needs tended to have some ill health behavior such as illicit drug use that could be their coping mechanism. On the other hand, emotional and informational support factors have shown an important mitigating effect on unmet needs.

Conclusions: These findings of unmet needs pose a major challenge to health education. To effectively address unmet mental health care needs, it is recommended that the focus of relevant policies and programs should be on enhancing a multi-level mental health education strategy including efforts on individual, environmental and professional level education.

Key Words: Health Education, Unmet Needs, Mental Health