# Patients' perception of health services for sexually transmitted infections in Singapore

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#### **ABSTRACT**

Introduction: The Department of Sexually Transmitted Infections (STI) Control (DSC) Clinic is the only public STI clinic in Singapore. This study aimed to determine patients' perception of the clinic as well as the factors that may influence their choice of DSC Clinic over other medical facilities. The concerns of certain risk groups were also assessed.

Methods: Self-administered anonymous questionnaires were offered to Singaporeans and Permanent Residents over 18 years of age who were seeking treatment at the DSC Clinic. 1,000 responses were collected over a period of four weeks in May 2009.

Results: More than two-thirds of the patients had a positive experience at the DSC Clinic and would recommend the clinic to their family and friends. Positive attributes included competence of staff and the convenience of a one-stop treatment facility. The patients' visits to the DSC Clinic also prompted them to engage in safer sexual practices. Stigma was surprisingly not an issue among more than three-quarters of the patients. Confidentiality of medical records was a major concern, with more than half of the patients unwilling to share their records with other healthcare providers, employers or insurance companies. The majority of patients would like to see the provision of clinics catering to special groups such as young people, women as well as men-who-have-sex-with-men.

Conclusion: The majority of patients were satisfied with the health services provided at the DSC Clinic. Confidentiality in consultation was of prime importance to patients.

Keywords: confidentiality, healthcare surveys, public health, sexually transmitted diseases

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## INTRODUCTION

The Department of Sexually Transmitted Infections (STI) Control (DSC) Clinic in Singapore was first established to provide specialist services for the treatment and prevention of STIs. The DSC Clinic remains the only public STI clinic in Singapore, serving both as a onestop clinic for direct walk-in patients as well as a referral centre for the country. Over the past decade, attendances at the DSC Clinic have been steadily increasing. All this while, emphasis has been on the delivery of quality healthcare services to patients. Much less is known about how patients seeking treatment perceive the delivery of such healthcare services. There has also been a lack of information about patients' expectations of sexual health services as well as the psychosocial issues involved in making a visit to an STI clinic.

In recent years, patient satisfaction has become an important aspect of the 'holistic healthcare experience', and measuring the level of patient satisfaction now regularly features in many patient-based outcome assessment tools. This study aimed to evaluate patients' perceptions of such a public sexual health facility, as well as to determine whether certain aspects of health services, such as confidentiality and public stigma, play a significant part in patients choosing the DSC Clinic. This study also looked at high-risk groups of individuals attending the DSC Clinic, who may have inherent unique concerns.

#### **METHODS**

This study was conducted over a four-week period in May 2009. The study consisted of a self-administered questionnaire containing 27 questions in either English or Chinese. There were six main sections in the questionnaire, namely demographics, awareness of the DSC Clinic, sharing of DSC medical records, special clinics and proposal for a second DSC Clinic, impact on subsequent sexual behaviour and rating of service. The questionnaire was anonymous. Consecutive patients seeking medical attention at the DSC Clinic who fulfill the inclusion criteria were invited to participate in the study. The inclusion criteria were Singapore Citizen or

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Table I. Demographics of respondents.

Demographic (n = 1,000)	No. (%)
Gender	
Male	853 (85)
Female	147 (15)
Age group (yrs)	
< 20	45 (5)
20–29	471 (47)
30–39	310 (31)
40-49	114 (11)
50–59	42 (4)
≥ 60	18 (2)
Race	
Chinese	766 (77)
Malay	124 (12)
Indian	60 (6)
Others	50 (5)
Educational qualification	
University and postgraduate	317 (32)
Diploma	301 (30)
Upper secondary	118 (12)
Lower secondary	212 (21)
No formal education	39 (4)
No response	13 (1)

Permanent Resident, age  $\geq 18$  years for male and  $\geq 21$  years for female, proficiency in either English or Chinese and no previous participation in the survey. Those who did not satisfy the above inclusion criteria were excluded from the study. We aimed to collect 1,000 responses.

The questionnaires were given to respondents who had verbally agreed to participate in the study at the start of their visits. Respondents were required to answer the questionnaire on their own. The completed questionnaires were collected at the end of the visit. The questionnaires did not contain information that would lead to respondents being identified individually. The study protocol had been approved by the ethics committee of the Domain Specific Review Board. Significance testing was carried out using the chi-square test.

# **RESULTS**

Among all the patients who visited the DSC Clinic to seek treatment over the four-week period in May 2009, 1,056 patients were eligible to take part in the study, out of which 1,000 (95%) completed all the responses. The majority of respondents were male (85%), with slightly more than half of the respondents below the age of 30 years. Those in the age group of 30–39

Table II. Sexual orientation of respondents.

Sexual orientation	No. (%)	
	Male (n = 853)	Female (n = 147)
Heterosexual	708 (83)	133 (90)
Homosexual	100 (12)	7 (5)
Bisexual	30 (3)	4 (3)
No response	15 (2)	3 (2)

years formed the second largest group of respondents. In terms of ethnicity, the majority of respondents were Chinese (77%), followed by Malays (12%), Indians (6%) and other races (5%). There was a wide spectrum of highest educational levels, ranging from no formal education to post-graduate qualifications. Slightly over 60% of the respondents had at least a post-secondary education (Table I). In terms of sexual preferences, the majority of the 853 (83%) male respondents were heterosexual, while 12% identified themselves exclusively as men-who-have-sex-withmen (MSM). Among the 147 female respondents, the majority (90%) were heterosexual, while 5% identified themselves exclusively as women-who-have-sex-withwomen (WSW) (Table II).

A series of questions were asked in the questionnaire pertaining to attendance at the DSC Clinic. Specific questions included whether respondents had been referred by an external doctor and who had referred them. It was also asked how the respondents come to know of the DSC Clinic and the means of transportation they used when visiting the clinic. The majority of respondents had not been referred to the DSC Clinic by external medical practitioners. External doctor referrals only accounted for slightly over a quarter of the respondents (28%), with the remainder comprising self-referrals. The bulk of the referrals from external doctors came from primary healthcare physicians in the public (39%) and private sectors (32%), with the remainder coming from public hospitals (18%), private hospitals (4%) and uniformed institutions (7%) such as the military and police force. The majority of respondents came to know about the DSC Clinic from various sources other than doctor referrals. These included the Internet (29%), word-of-mouth (26%), health talks and educational pamphlets (9%), and mainstream media (6%).

When asked about the purpose of their visits, 56% of the respondents indicated sexual health screening. Only 14% reported that they were attending specifically for treatment of STIs. The other reasons included respondents being contact traced (8%) and a combination of sexual health screening and treatment of STIs (7%).

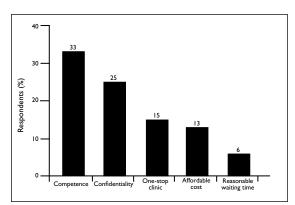


Fig. I Bar chart shows the five most important attributes of the DSC Clinic, as graded by the respondents.

Nearly half of the respondents came by their own mode of transportation (46%), while the bulk of the remaining respondents came in public transport (public buses and subway 28%, taxi 20%). Only 5% of respondents walked to the clinic.

The respondents were asked to rank, from the least to most important, the factors that would influence their decision to return to the DSC Clinic. The top three most important attributes were competence and expertise of the healthcare workers, followed by confidentiality and the DSC Clinic being a one-stop sexual health clinic (Fig. 1). Respondents did not consider waiting time and accessibility as reasons for not seeking treatment at the DSC Clinic. When asked about the stigma associated with seeking treatment at the DSC Clinic, more than three-quarters of the respondents (77%) reported either feeling neutral or not stigmatised. Out of the 230 who felt stigmatised, only 104 gave reasons for feeling so. The top three reasons given were: (1) STIs are still taboo (46%); (2) they felt embarrassed or ashamed to be seen at a sexual health clinic (24%); and (3) they were automatically assumed to have an STI if they were seen at the clinic (17%).

These attributes and the issue of stigmatisation were further analysed along the lines of gender, race and educational background. In terms of race, the results were similar across the four racial groups; the differences observed between the racial groups in terms of competence, confidentiality and one-stop clinic were not statistically significant. Only the difference observed in cost was significant (p=0.005), i.e. the Chinese and Indians felt that cost was an important consideration as compared to the Malays and those of other races (Fig. 2). In terms of educational background, the differences observed among the five educational levels were all statistically significant, i.e. respondents with a higher educational level were more likely to consider competence, confidentiality, one-stop

clinic and cost as important reasons for choosing the DSC Clinic (Fig. 3). The differences observed along gender lines were not statistically significant (Fig. 4). In terms of stigma, the observed differences were not statistically significant when analysed along the lines of gender, race and educational background (Figs. 2–4).

When asked about their willingness to share their DSC medical records, slightly more than half of the respondents did not want their DSC medical records to be shared with other medical institutions and health facilities. The figures were similar for public and private health institutions (54% and 56%, respectively); their unwillingness to share was higher when it involved sharing records with the respondents' own employers/ company-designated doctors (66%). The figures were even higher with regard to sharing such records with nonhealthcare facilities. The proportions of respondents who were unwilling to share their records with government agencies/departments and insurance companies were 65% and 67%, respectively. With regard to sharing medical records with their employers, more than 70% of respondents were unwilling to do so (Fig. 5). The difference between public hospitals and employers was statistically significant (p = 0.007), while the differences between other groups were not (p > 0.05).

Respondents were also asked how they felt about the need to set up clinics for certain groups of patients who were considered to be vulnerable and at high risk, and whether there might be significant stigma associated with seeking treatment at a sexual health clinic. 61% of respondents thought it was important or very important to set up a clinic catering to the needs of young patients, whereas 30% were neutral and 6% did not think it was important. With regard to the setting up of a women's clinic, 61% thought it was important or very important, 30% were neutral and 5% thought it was unimportant. In terms of an MSM clinic, 51% felt it was important, 35% were neutral and about 10% felt it was unimportant. The analysis of data within the respective subgroups revealed that among the 147 female respondents, 80% felt that it was at least important to have a clinic specially set up to cater to them, while 15% were neutral and 2% felt it was unimportant. Among the 130 MSM respondents, 74% felt that it was least important to have a clinic created for them, 18% were neutral and 5% felt that it was unimportant.

The respondents were then asked to choose from a list of options, their preferred location for a second DSC Clinic if there were plans to set up one. About two-thirds of the respondents felt that it should be a standalone clinic, just like the current DSC Clinic, 16% preferred to have the second DSC Clinic sited within a public

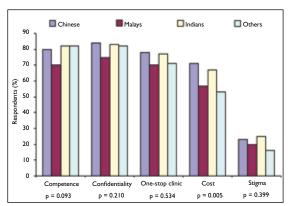


Fig. 2 Bar chart shows the five most important attributes according to racial groups

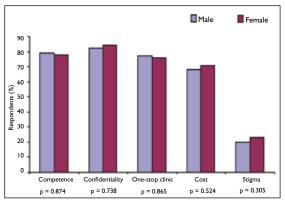
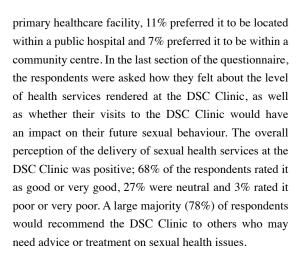


Fig. 4 Graph shows the five most important attributes according to gender.



The respondents were also asked to separately rate the usefulness of the following: nurse triage/consultation prior to doctor consultation; sexual health advisors who would provide additional health advice as well as follow-up services such as contact tracing; and health educational pamphlets. Over half (56%) of the respondents found the practice of nurse consultation to be useful, whereas 7% did not and 35% were neutral. With respect to the usefulness of health advisors and educational pamphlets, the approval figures for both were identical; 63% of respondents thought they were useful, while 31% were

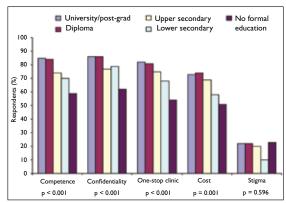


Fig. 3 Bar chart shows the five most important attributes according to educational level.

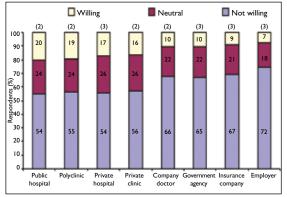


Fig. 5 Graph shows respondents' willingness to share DSC medical records.

Percentages in parenthesis indicate 'No Response'.

neutral and 3% found them unhelpful. About four-fifths of the respondents reported that their visits to the DSC Clinic would encourage them to engage in safer sexual practices in future.

# DISCUSSION

In recent years, patient satisfaction has become one of the key indicators in the overall assessment of healthcare delivery. This is the first time that such a survey has been conducted in a sexual health clinic in Singapore. We aimed to recruit 1,000 respondents, and over the four-week period in May 2009, we managed to reach our target number of respondents out of 1,056 eligible patients (95% participation rate). The high participation rate may be attributed to the anonymous nature of the survey. There have been concerns about the validity of results from anonymous questionnaire-based studies as opposed to non-anonymous ones. Factors such as sexual attitudes, sociocultural, ethnic and religious backgrounds may influence what patients share in the different types of studies. One study on sexual behaviours comparing anonymous questionnaires to interviews showed a high level of agreement and no significant differences between the two methods. (1) Another study suggested that patients'

responses tend to be more truthful in the anonymous questionnaires as compared to medical interviews, where responses are more conservative. (2) Given the Asian context of our society, we felt that an anonymous questionnaire would yield a higher participation rate, and the information obtained would also likely give a better reflection of how respondents felt.

The majority of our respondents were male (85%). This is similar to the proportion of male-to-female patients attending the DSC Clinic in general. The proportion of the various racial groups was also representative of the general population of Singapore, based on the National Census.<sup>(3)</sup> Likewise, our respondents came from a wide spectrum of educational backgrounds. We noted that more than half were under the age of 30 years, and those aged 30–39 years formed the next largest group. This is not surprising, as we would expect individuals within these age groups to be more sexually active and more likely to have multiple sexual partners, as well as engage in other higher-risk sexual behaviours.<sup>(4-6)</sup>

Our respondents had learnt about the DSC Clinic from a variety of sources, ranging from the Internet, word-of-mouth to doctor referrals, with mainstream media and health education materials making up the bulk of the remaining sources. This suggests that knowledge about the existence of a DSC Clinic is widespread and that patients seeking sexual health services should not encounter major difficulties in obtaining more information about the DSC Clinic. This also suggests the availability of various avenues to reach out to target populations for sexual health intervention and prevention programmes. Competence, confidentiality and the convenience of a one-stop health facility were the three attributes reported as being most crucial for a sexual health clinic. Such findings are consistent with the experiences of sexual health services elsewhere. One study done by Hitchings et al found that the most highly valued aspects of integrated sexual healthcare were confidentiality, speed of service, rapid tests results, early access and technical expertise.(7) In another Australian study involving 270 new English-speaking clients, using a similar method of anonymous selfadministered questionnaire, more than half of the study participants ranked expert care as one of the top three reasons for choosing a sexual health clinic over a general practitioner, while confidentiality and cost were cited by one-third of the participants. (8)

Given the nature of sexual health, confidentiality is of paramount importance to patients. In our study, we noticed a trend that respondents became less willing to share their DSC medical records as we moved from the public health sector to the private health sector and eventually, to the non-health-related sector. In the case of company-designated clinics, there may be concerns that such information may be shared with their employers and colleagues. With regard to government agencies and departments, insurance companies and employers, there may be additional social and employment repercussions. Similar findings were observed in an Australian study, where participants in that study were comfortable with disclosure of information to other healthcare workers but became increasingly unwilling to share the information with services not directly involved in their care.<sup>(8)</sup>

Other studies have shown that patients with STIs and HIV infections continued to be discriminated against. In many societies, people continued to hold fears, prejudices and general intolerance toward them, (9,10) especially HIV-infected individuals. Likewise, many of such patients are also reluctant to reveal their conditions to their family members for fear that they too, would face similar discrimination.(11) Attending a sexual health clinic and STIs are taboo in many societies. We were particularly concerned that stigma would be an issue among our respondents. Despite earlier concerns about confidentiality, we were pleased to learn that 78% of our respondents either felt neutral or did not feel stigmatised when visiting the DSC Clinic to seek medical attention. However, there is a possibility of self-selection bias, as would-be patients who feel strongly about being seen at a sexual health clinic would not have attended the DSC Clinic in the first place; they would have gone to other health facilities where their conditions could be hidden among a sea of more common ailments.

We noted two groups of respondents who were of particular concern. The first consisted of patients below 20 years of age. There were 45 such respondents, making up nearly 5% of our total number of respondents, and reflected the global trend of individuals becoming sexually active at a younger age. (12-14) The second group were the MSM. The percentage of respondents who identified themselves as MSM in our study was 15%. It has been reported that MSM are more likely to contract STIs,(15-17) and may thus have higher sexual health awareness and a tendency to seek STI screening more frequently. These two subgroups comprised higher-risk individuals, and therefore, it is pertinent that sexual health prevention and intervention programmes are specially tailored to target these vulnerable subgroups. It was reassuring to note that more than half of the respondents agreed that it is important to set up special clinics to target these subgroups.

In terms of patient satisfaction on services provided at the DSC Clinic, the majority of the respondents were happy with their overall experience and would recommend the DSC Clinic to someone who requires similar medical attention. Two-thirds of the respondents indicated their preference for a future STI clinic to be a standalone clinic, similar to the current one. Again, this likely reflects the underlying concerns discussed earlier, and such a standalone clinic would provide the necessary exclusive environment for patients to seek treatment without stigma or prejudice. One study suggested that significant stigma still exists for patients who are seen seeking treatment at a sexual health or genitourinary clinic in the setting of a larger healthcare facility such as a hospital. (18) In the longterm planning of sexual health services, the concept of a standalone clinic must continue, and the current model can serve as a framework for subsequent sexual health clinics in the country.

In summary, this is the first study in our country to evaluate patients' perceptions of health services for STIs. The patients had a good experience at the sexual health clinic, and the positive attributes of the current service included professional competence, confidentiality and the convenience of a one-stop clinic. Confidentiality remains an important concern among most patients, and if given a choice, most would prefer future sexual health clinics to be standalone clinics.

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