

The dental clinic is an appropriate place to promote the prevention of hepatitis C virus (HCV) infection and fast access for care of HCV positive subjects with new generation anti HCV drugs

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Abstract

This project was aimed toward promoting a screening program for HCV during a dental clinic affiliated to the Italian National Health System (NHS), by using the Easy-HCV test. This study aimed to work out the socio-demographic profile of subjects screened for HCV virus during a dental clinic to accumulate useful information for future campaigns of prevention. An easy, free-of-charge, screen salivary test was offered to patients mentioned the dental clinic of San Raffaele research project Hospital in Milan, Italy for dental procedures. These patients were also asked to finish an anonymous questionnaire on demographics and risk behaviours. The themes included within the sample came from a unit of dentistry belonging to a personal Hospital in Milan, North Italy, affiliated with the Italian NHS, that pays for the dentistry procedures reserved for people that belong to weak social groups (that pay only a ticket), or that are exempt from the ticket payment, due to a pathology, or a coffee income. Today, the planet Health Organization (WHO) has estimated that about 71 million people within the world are still suffering from chronic hepatitis C virus (HCV) and 399000 subjects die per annum thanks to cirrhosis and cancer caused by HCV. For these reasons, the control of hepatitis is currently, ethically urgent and even economically convenient. The present strategies should include: (1) primary prevention (including vaccination and improved infection control), (2) improving diagnosis rate, and (3) management of existing cases of infections.

The WHO strives to realize goals of sustainable development by 2030 in many countries, increasing screening services, care and treatment, to realize projects the HCV elimination by 2030. In line with the WHO, the Italian NHS has played a really important role in health promotion in these years. The elimination of the HCV virus might be achieved in Italy only with the support of the NHS, and changes in management with reference to screening, prevention and treatment practices are needed. During this climax, a screening for HCV infection within the snits of Dentistry seem to be a promising strategy to realize the result. This data represent a pilot experience within the direction, supported by the patient's associations. A previous part of the database had already been described. In USA a recent survey evaluated the state of art within the screening programs for HCV, and reported that the foremost common screening campaigns are performed by from adult medical care doctors (44.2%), obstetrics and gynecology providers (31.7%). They retrospectively evaluated a sample of 444594 subjects (59.7%

females; 39.2% = White race, non Hispanic; 8.9% = Hispanic; 36.3%: black race; 15.6%: other), bringing to both public and personal insurance programs. From Linas' data it results that 15.8% of the sample were screened for HCV a minimum of once during followup. While within the present sample, the share of subjects who had just been screened before the HCV test is 26.23% of the sample (374 over 1426). Although the info from this European/Italian sample are more encouraging reference to USA data (also considering that the USA cohort was more in danger reference to this sample, as only 46.7% of these subjects resulted never having drug use history, reference to this percentage above 95%), the share of never screened subjects are often considered still too low everywhere the planet, and wishes implementation. This study shows that factors related to being screened are the extent of education and therefore the presence of risky factors.

Risky factors (referred piercings, tattoo, and use of injection drugs) seem to be a big predictor for HCV screening, within the sense that those with a highest level of risk seem to possess about 1.39 more opportunities than those with a coffee level of risk to be ready to screening for HCV. Additionally, also the extent of education seems to be a big predictor for HCV screening, within the sense that those with the very best education level (high-school, bachelor degree, or post-graduate degree) seem to possess about 1.5 more opportunities than those with lower educational attainment to be ready to screening for HCV. The Infectious Diseases Department and therefore the Department of Dentistry of San Raffaele Scientific Institute in Milan conducted a screening and prevention program, the "EASY HCV-test Program," at a dental clinic to extend the recognition of unrecognized infections. Employing a cross-sectional community-based study design, hygienists within the dental clinic offered patients a hepatitis C virus (HCV) rapid salivary test (OraQuick ADVANCE® Rapid HCV Antibody Test) with pre and post-test counseling before initiation of their oral hygiene routine. From April 2015 to November 2015, the straightforward HCV test was offered to 2650 patients visiting the middle of Oral Health and Prevention at the Department of Dentistry at San Raffaele Hospital in Milan. Among them, 2077 eligible volunteers were tested. The test showed positive reactivity in 22 cases; of those, 21 subjects were known to suffer from HCV, and therefore the test confirmed their status. One subject was newly diagnosed with HCV infection.

The results of this study suggest EASY HCV test screening conducted in dental clinics may constitute an efficient strategy

for expanding HCV testing among people in danger for infection. The demographics of the population responding to the current initiative was primarily Italian citizen (96.47%), homogeneous gender distribution (55.55%), age over 50 (609 subjects; 43.88%), with higher level education and stable professional positions. 905 subjects (65.20%) were never tested for HCV before. The test showed positive reactivity in 22 cases (1.05%); of those, 21 subjects were known to be HCV-positive, and therefore the test confirmed their status. One subject was newly diagnosed as HCV-positive. The share of subjects who were never tested for HCV infection appears too high (905 subjects, i.e., 65.20%), especially among subjects with higher level of education and professions, and among adults over 40 or children (18-25). The straightforward screening test in dental clinic can help raise awareness, promote early diagnosis and

prevention, and supply a quick link to worry for HCV infection. The dental clinic is an appropriate place to market the prevention of hepatitis C virus (HCV) infection and fast access for care of HCV-positive subjects with new-generation anti-HCV drugs. This study aimed to work out the socio-demographic profile of subjects screened for HCV virus during a dental clinic to accumulate useful information for future campaigns of prevention. The dental clinic is an appropriate place to market the prevention of hepatitis C virus (HCV) infection and fast access for care of HCV-positive subjects with new-generation anti-HCV drugs. This study aimed to work out the socio-demographic profile of subjects screened for HCV virus during a dental clinic to accumulate useful information for future campaigns of prevention.