FOLLOW-UP OF THE INTERNATIONAL TRAVELER

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KEYWORDS: international travelers, infectious diseases, prevention

ABSTRACT

Travel health promotion aims to inform about the risks associated with international travel and ways to prevent them. At the U.O. Hygiene and Health Public of the Local Health Authority of Romagna, there are dedicated clinics that offer consultancy and vaccine prophylaxis. There is currently no follow-up on the return of the traveler who has gone to the clinic. In light of the above, a prospective observational study was prepared through the administration of an anonymous online questionnaire, drawn up on the basis of the available literature and aimed at international travelers who presented themselves for a pre-trip interview at the U.O. Hygiene and Public Health of the USL Company of Romagna A.T. of Rimini in the period between October 2019 and July 2020, in order to follow the traveler back to Italy and provide useful elements to guide and improve the pre-trip interview. To complete the study, data was collected on the activity of the Rimini clinic for travelers for the period 2013-2019 and an analysis of the cases of imported infectious diseases reported in the province of Rimini in the period January 2015 -July 2020. The traveler is informed about the health risks of the trip (94.1%), satisfied / very satisfied with the interview (92.1%) and with the information received (70.6%). The most frequently administered vaccinations to travelers are those against hepatitis A, yellow fever and typhoid fever. Malaria is the most frequently reported import disease, followed by hepatitis A and dengue. In 54.5% of cases, the reason for the trip was a visit to relatives or friends, data in line with the literature.

INTRODUCTION

In recent years, international travel growth has been around 6% annually and into the future similar trends are expected. This growth was heavily influenced by travelers to popular new destinations in Asia and the Pacific, Africa and the Middle East. About 80 million people from industrialized nations travel to the countries every year developing country and it is estimated that over 200 million people reside outside their country of birth (Chen and Wilson, 2008).

European travelers account for the majority of international travelers: Germany, United Kingdom, France and Italy constitute the main ones countries of origin (Gautret et al., 2009).

According to the Ministry of Health, each year there are about 18 million Italians who leave for foreign, often tropical locations (Epicentro and ISS, 2019). Travel to, from and to Europe is on the rise, it is estimated with the current pace of growth predicted, there will be 1.8 billion tourist arrivals worldwide in 2030 (Wilder-Smith et al., 2018). In a globalized world with travel and population movements always increasing, the risk of importing or exporting diseases is constantly increasing.

The intense international traffic between Europe and the rest of the world means travelers they have become a key element in the global spread of infectious diseases. These diseases can be introduced into European populations and domestic environments they are receptive to further diffusion (Gautret et al., 2009). Many of these diseases are vaccine preventable (VDPs – Vaccine Preventable Diseases). A study published in 2010, which involved all travelers who turned to a GeoSentinel clinic in period 1997-2007, showed that 1.5% of travelers with fever had a VDP. The most common VDPs found in the study included: enteric fever (typhus and paratyphus), viral hepatitis A and B, flu, chickenpox, measles, whooping cough and bacterial meningitis.

More than half of these patients with VDP were hospitalized. Variables that can contributing to the risk of VDP in travelers include: age, reason for travel, destination and pre-trip preparation (Boggild et al., 2010). The itinerary and activities in which the traveler participated are crucial in making a differential diagnosis, since the exposures potentials vary by region of travel and behaviors (CDC, 2019f).

Currently due to the COVID-19 pandemic, travel and tourism are among the most sectors affected, with a net reduction in international travel. Arrivals of international tourists in the first quarter of 2020 have shrunk to a fraction of what they were a year earlier. The available data indicates a 22% decline in the first quarter of 2020, with arrivals in March in 57% drop. Asia and the Pacific were the first to suffer the impact of the pandemic, recording a 35% reduction in arrivals in the first quarter of 2020, followed by Europe with a decline by 19%, the Americas (-15%), Africa (-12%) and the Middle East (-11%). Current scenarios indicate a drop from 58% to 78% in international tourist arrivals in 2020, depending on the speed of containment, duration of travel restrictions and reopening of national boundaries, although the outlook remains highly uncertain (UNWTO, 2020b).

Due to the absence of a denominator (population at risk), the absolute risk of a travel-related illness or infection cannot be determined, despite this limitation of surveillance in international travelers is crucial to

determine the epidemiology of travel-associated diseases. A recent literature review has highlighted that between 6% and 87% of travelers get sick showing symptoms during or after the trip (Wilder-Smith et al., 2018). Travel-related health problems were reported in 22% - 64% of travelers in developing countries. Although most of these diseases is mild, 8% of travelers required medical treatment (Schlagenhauf et al., 2015). Most post-travel infections occur immediately after the trip, but incubation periods vary and some diseases can present months or years after initial infection (CDC, 2019f).

In Europe, according to 2008-12 surveillance data, malaria and acute diarrhea have shown the highest proportional morbidity rate. An increase was also found of vector-borne infections such as Dengue fever and Chikungunya fever. Between the European travelers, according to the country visited results: disease acquired from sub-Saharan Africa (32%), from Southeast Asia (14%), from Central South Asia (13%), from the South America (8%) and Europe (6%) (Schlagenhauf et al., 2015).

Travel medicine constitutes a public health tool thanks to its activity of promotion and protection of the health of international travelers. Many travelers however don't they seek health advice when planning international travel, even if their own trip it could put them at risk for preventable diseases. A recent complete overhaul of literature has shown that between 6% and 87% of travelers fall ill during or in travel consequence (Wilder-Smith and Boggild, 2018). The most frequent complaint is diarrhea of the traveler that reaches between 30 and 50% of people. The traveler is also subject to pathologies now rare or disappeared in Italy, but very widespread in many countries such as malaria, rabies, typhoid fever and yellow fever.

For many years, public and international health authorities and many scientific groups are engaged in the search for evidence that can support health promotion activities while traveling, few studies have investigated the role of the pre-trip interview. It is about studies who only enrolled patients who had referred to specialized clinics. In the light of these studies, pre-travel advice seems to be able to increase adherence to the vaccination (> 80%) and to change behaviors, especially those related to foodborne diseases or the use of repellents (Tafuri et al., 2014). According to a recent European study, the pre-trip interview appears to be associated with a morbidity rate less than malaria while it would be less effective for the prevention of diarrhea traveler (Schlagenhauf et al., 2015). A 2011 retrospective cohort study has demonstrated the effectiveness of pre-travel counseling (Tafuri et al., 2014).

There are clinics at the Public Hygiene Services of the Local Health Authority of Romagna dedicated to this specific activity. Through the pre-trip interview, they are provided information, based on indications from international and national bodies and organizations such as for example WHO - World Health Organization, CDC - Centers for Disease Control and Prevention, Ministry of Health, Department of Health Policies of the Region Emilia-Romagna etc. which constitute a national and international surveillance network deputy to detect epidemiological mutations of diseases or events that can affect the international traveler. The information is mainly about: what precautions adopt to prevent problems related to climate change and different conditions sanitation of the place of destination; as prophylaxis regarding any risk malaria and what precautions to take during your stay; what vaccinations are mandatory (according to the provisions that government authorities prescribe for entry in the country) and which vaccinations are recommended to protect against risk. Vaccinations most frequently requested or recommended are against yellow fever, viral hepatitis A, viral hepatitis B, typhus, tetanus and diphtheria (RER, 2016). The follow-up on the return to Italy of the traveler who referred to the clinic.

In the pre-pandemic period from Covid-19, the increase of international travel had repercussions on the activity data of the dedicated clinics at the Rimini office with an increase in the number of consultancy: from n. 73 in 2013 to n. 273 in 2019, for a total of 894 consultations in the period 2013-2019. Travelers who showed up at the Rimini clinic they are male in 46.9% of cases (No.
419), female in 51.3% (No. 459) and missing 1.8% (no. 16). The average age is 35.1 years (range of 1-79, median 33). The reason for the travel results: tourism (59.1% - n. 528), volunteering (15.2% - n. 136), work (8.6% - n. 77), family reasons (5.1% - No. 46) and other (12% - No. 107).

The average length of stay is 38.7 days (range 4 - 730, median 22). From consulting the management software computerized OnVac vaccination registry, vaccinations more frequently administered are anti-hepatitis A, anti-yellow fever and anti-typhus.

The goal of the "Follow up after returning from an international trip" study is to follow, 45-60 days after returning to Italy, the international traveler who has applied to the clinic for a pre-trip interview, in order to collect information about: adherence to the indications provided during the interview, in particular, vaccine prophylaxis, antimalarial chemoprophylaxis and behavioral measures; identify any risky behaviors and disorders arising during and / or after the trip and the use of treatment medical. The data collected in this way could provide the healthcare assistant and other operators outpatient health care elements useful for orienting and improving the pretrip interview. The study would be in line with what the literature suggests: travel medicine needs constant testing to identify areas of strengths and weaknesses (Schlagenhauf et al.,2015). Pre-trip interview assessment studies by travelers can provide information on the impact of the

P	Population	International travelers who come for a pre-trip interview at the International Prophylaxis - Travel Medicine clinics of the U.O. Hygiene and Public Health of the Local Health Authority of Romagna-A.T. Rimini.
I	Intervention	Pre-trip interview
C	Comparison	Vaccinoprophylaxis, antimalarial prophylaxis and behavioral measures proposed during the pre-trip interview on the basis of international and national indications
O	Outcome	Adherence to the indications provided during the interview, in particular, vaccine prophylaxis, antimalarial chemoprophylaxis and behavioral measures, identification of any disorders arising during and / or after the trip and the use of medical treatment
S	Study design	Prospective observational study

Tab. 1 - *Breakdown of PICOS applications for the follow-up of the international traveler*

interview and on the disorders / illnesses that arose during or after thetravel (Tan et al., 2018).

METHODS AND MATERIALS

Monocentric prospective observational study carried out by administering an anonymous online questionnaire. The study population is made up of travelers who do present in the period 01 October 2019 - 31 July 2020 for a pre-trip interview at the travel medicine clinics of the U.O. Hygiene and Public Health of the USL Company of Romagna A.T. of Rimini.

Exclusion criterion: travelers who do not return to Italy in the time period of carrying out the survey, foreign travelers with language difficulties, travelers who they refuse to take part in the survey, travelers <18 years of age.

The Travel Medicine clinics of the U.O. Hygiene and Health Public of the Local Health Authority of Romagna, A.T. of Rimini. The study provides for the completion of a selfadministered anonymous online questionnaire, after 45-60 days from return to Italy, by the traveler who presented himself at the dedicated clinics. During the pre-trip interview, the operator present in the clinic will deliver the user the information form and will acquire consent to participate in the survey.

As a reminder to complete the questionnaire, the co-investigator will contact the traveler within 45-60 days of returning to Italy by e-mail or by telephone (by choice of the user). The consent and the form with the useful data to contact the user will be collected monthly by the coexperimenter.

The questionnaire is divided into 7 sections based on homogeneous conceptual areas: personal data (5 items), information relating to the type of trip (7 items), information relating to vaccinations performed (3 items), information relating to malaria prevention (8 items), behaviors and disorders during the trip (4 items), troubles upon returning from the trip (7 items) e evaluation of the pre-trip interview (5 items) (Attachment 1).

Open, closed, multiple choice and mixed choice questions were used. The questionnaire was prepared using Google Forms which automatically generates a database in Excel.

Statistical considerations

- Based on the number of travelers who showed up for an interview prior to the trip in 2018, and considering a standard percentage of non-respondents (15%), it is expected to involve about 238 in the recruitment time considered (10 months) travelers.
- Variables in the study: age, sex, residence, citizenship, educational qualification, destination of travel, duration of travel, type of travel, reason for travel, vaccine prophylaxis, malaria risk and prevention measures, risk behaviors, arising disorders during and on return from the trip and measures taken.
- For each of the variables considered, a descriptive analysis will be carried out through the calculation of the following parameters: absolute and percentage frequency, average and median, standard deviation, ranges and percentiles.

Ethical aspects and publication policies

Before joining, all potentially eligible travelers will receive the information complete on the study and will express their consent to the participation and processing of data personal data pursuant to the European Regulation on the protection of personal data n. 679/2016 (GDPR) and the Provisions issued by the Guarantor for the protection of personal data in matter. The data collection is for scientific purposes, the results of the survey will be disclosed in form anonymous and aggregated and in no case will they be attributable to individual persons. The data they belong to the Romagna AUSL which is the promoter of the study. The study received the approval of the Ethics Committee of Romagna (CEROM) with opinion no. 2474 express in the sitting of 24.07.2019.

Organizational aspects

Carrying out the survey involves the involvement of health professionals (Assistant Healthcare/Nurse) of the travel medicine clinics of the Romagna AUSL A.T. of Rimini. During the pre-trip interview, the traveler will be informed about the study e on how to participate, the information form will be given and it will be acquired consent.

The co-investigator will provide for compliance and a high response rate when sending a reminder e-mail or a telephone recall (chosen by the traveler), after 45-60 days from the expected return to Italy.

The co-experimenter, in case of difficulty regarding online self-compilation, proceeds to a telephone interview to be agreed with the traveler himself.

RESULTS

Sample

The survey was attended by all travelers who came to the clinic for the pre-trip interview in the period 01 October 2019 - 31 July 2020, during which he comes generally filled in a form used in the clinic ("Traveler Card international"). The pre-travel consultations carried out during the study period were 139. The study adherence rate was 38.1% (n. 53). Later it was 24.5% of 139 travelers (34) can be interviewed for follow-up. The reasons for the failure to fill in were: unavailability after three telephone attempts (7 travelers), trip cancellation due to a Covid-19 pandemic (11 travelers), return in Italy after the study period (1 traveler).

34 questionnaires were correctly filled in and analyzed. The questionnaire was administered by telephone or by e-mail in a period between 45-60 days from return (average 50.7 days). The average age of the interviewees was 35.3 years (range 20-69, median 32), 70.6% (No. 24) female and 29.4% (No. 10) male. 100% (34 respondents) is resident in the province of Rimini, 94.1% (32 respondents) are citizens Italians, the remaining two are a Ukrainian and a US citizen.

Information relating to the type of trip.

The duration of the trip is on average 18 days (range 8 -61, median 14.5):

- short trip (≤15 days) 52.9% - 18 respondents;
- average trip (> 15 ≤ 60 days) 44.1% - 15 respondents;
- long trip (> 60 days) 2.9% - 1 interviewee.

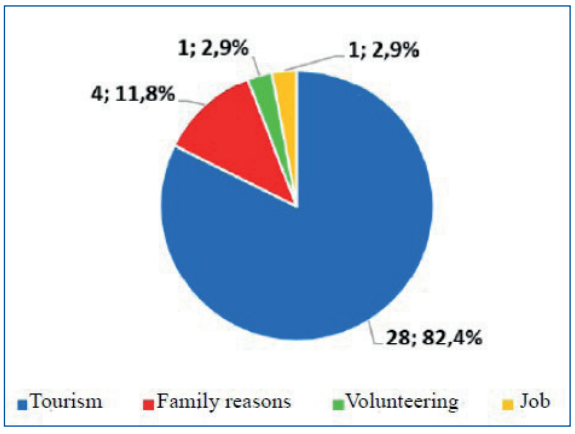

Fig. 1 - *Reason for the trip.*

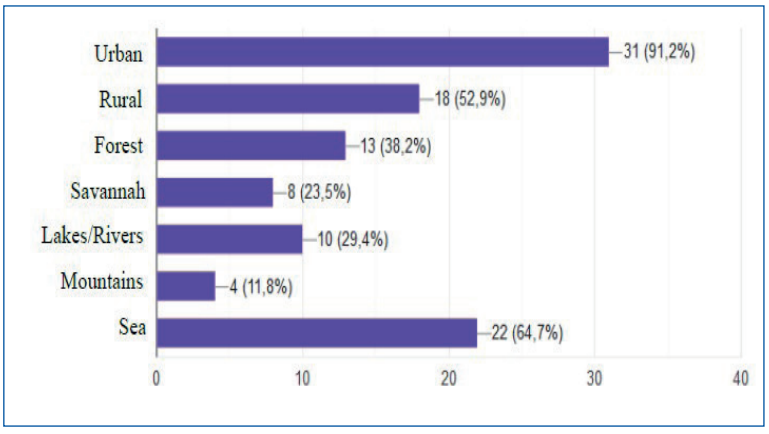

Fig. 2 - *Living areas visited during the trip*

Regarding the destination of the trip, the sample is distributed as follows:

- Africa 44.1% - 15 respondents: Kenya (3), South Africa (2), Tanzania (2), Senegal (2), Madagascar (2), Nigeria (1), Gambia (1), Ethiopia (1) and South Africa-Zimbabwe (1);
- Asia 32.4% - 11 respondents: Thailand (3), Thailand-Cambodia-Vietnam (2), Cambodia (2), India (2), Vietnam (1) and Myanmar (1);
- South America 20.6% - 7 respondents: Brazil (3), Colombia (1), Argentina (1) and Brazil-Argentina-Paraguay-Uruguay (2);
- Central America 2.9% - 1 respondent: Barbados (1).

It was an adventure trip in 70.6% (24 respondents) and organized in 29.4% (10 respondents).
Participants stated that they traveled for the following reasons:

- tourism 82.4% - 28 respondents;
- family reasons 11.8% - 4 interviewees;
- volunteering 2.9% - 1 interviewee;
- work 2.9% - 1 interviewee (Figure 1).

During the trip the areas visited were (it was possible to give more answers):

- urban 91.2% - 31 respondents;
- sea 64.7% - 22 respondents;
- rural 52.9% - 18 respondents;
- forest 38.2% - 13 respondents;
- lakes and rivers 29.4% - 10 respondents;
- savannah 23.5% - 8 respondents;
- mountains 11.8% - 4 respondents (Figure 2).

Information relating to vaccinations performed

With the exception of 1 traveler, in 97.1% of cases (33 respondents) pre-trip counseling is was completed with a vaccination intervention and with execution in most cases (81.8% - 27 respondents) of the proposed vaccinations. Six respondents (18.2%) did not carried out the proposed vaccinations because: insufficient time interval before the departure (4 interviewees), contraindications (1 interviewee) and refusal (1 interviewee).

Information relating to the prevention of malaria

41.20% (14 respondents) said they had visited a malaria risk area. Of these 78.6% (No. 11) followed the recommended prevention measures and 21.4% (No. 3) did not. The prevention measures were behavioral in 100% of travelers. 63.6% of travelers (7) said they had followed antimalarial chemoprophylaxis, 36.4% (n. 4) no for refusal. The recommended drug is mefloquine in 42.9% (No. 3), in 14.3% (No. 1) atovaquone plus proguanil, chloroquine in 14.3% (No. 1), two travelers (28.6%) declare I don't know, I don't remember (Figure 3).
Among those who performed chemoprophylaxis (7 respondents): 85.7% (6 respondents) took the drug for as long as necessary, 14.3% (1 respondent) did not take the drug for all the time needed for gastric upset (Figure 4). During the trip none of the travelers underwent self treatment for suspected malaria.

Behavior and disturbances while traveling

The travelers stated that they had the following be-

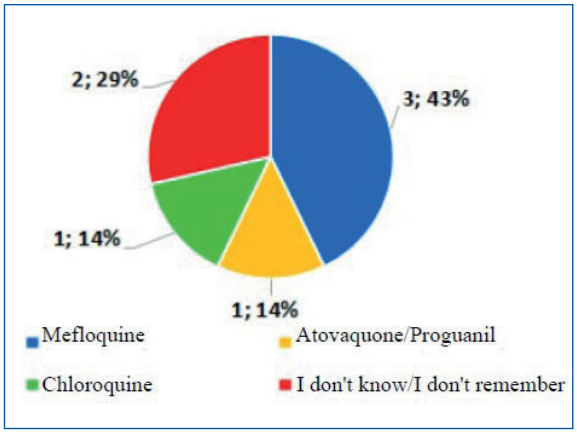

Fig. 3 - *Type of antimalarial chemoprophylaxis.*

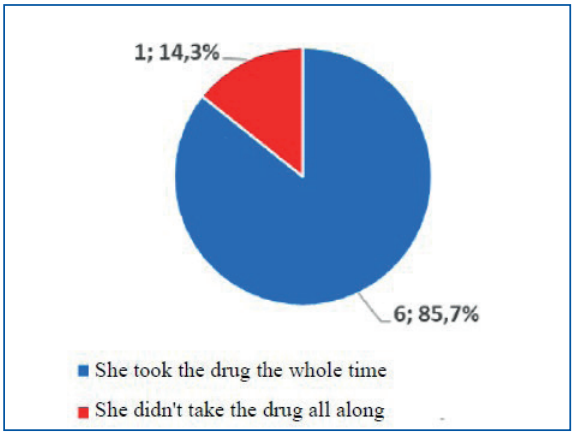

Fig. 4 - *Completeness of antimalarial chemoprophylaxis.*

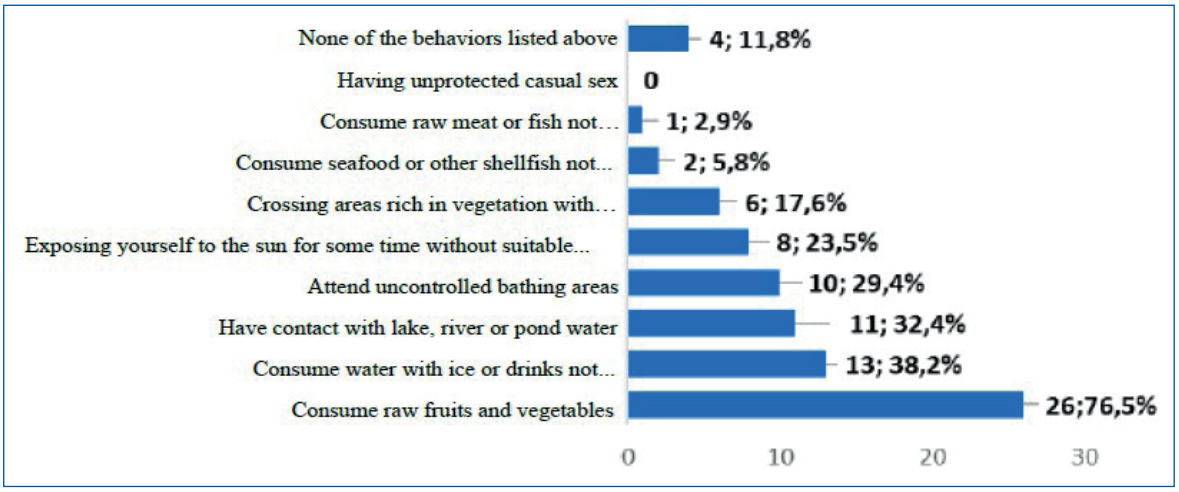

Fig. 5 - *Behaviors during the journey*

haviors during the trip (era possible to give more answers) (Figure 5):

- consume raw fruit and vegetables 76.5% (26);
- consume water with ice or non-bottled drinks 38.2% (n. 13);
- have contact with lake, river or pond water 32.4% (n. 11);
- attend uncontrolled bathing areas 29.4% (10);
- expose yourself to the sun for some time without suitable protection (sunglasses, creams solar) 23.5% (no. 8);
- cross areas rich in vegetation with unsuitable footwear or clothing 17.6% (no. 6);
- consume seafood or other inadequately cooked shellfish 5.9% (No. 2);
- consume raw meat or fish not adequately cooked 2.9% (n. 1);
- have occasional unprotected sexual intercourse 0% (n. 0);
- none of the behaviors listed above 11.8% (4).

14.7% (5 travelers) said they had the following ailments while traveling (was possible to give more answers) (Figure 6):

- diarrhea 60% (n. 3);
- nausea 40% (n. 2);
- vomiting 20% (n. 1);
- burn 20% (n. 1);
- cough and sore throat 20% (n. 1).

With regard to disturbances upon returning from the trip, 14.7% (5 interviewees) declared to have had (it was possible to give more answers) (Figure 7):

- diarrhea 40% (n. 2);
- nausea 20% (n. 1);
- abdominal pain 20% (no. 1);
- skin manifestations 20% (n. 1);
- jet lag 20% (n. 1);
- cough and cold 20% (n. 1).

In 80% (4 travelers) the disturbances appeared upon return or immediately after and in one case after 20 days. The duration of symptoms was on average 7.4 days (range 1-14, median 7). 40% (2 travelers) contacted the General Practitioner; no investigations have been made, only one interviewee was prescribed an antipyretic and a cough suppressant.

Evaluation of the pre-trip interview

94.1% (32 travelers) declare that they already know the possible risks of a trip international, 5.9% (No. 2) no.

Regarding the usefulness of the information received in the clinic during the pre-trip interview 70.6% (No. 24) declared a lot, 29.4% (No. 10) quite (Figure 8).

The pre-trip interview was rated very satisfactory in 55.9% (n. 19), in 35.3% (n. 12) satisfactory, uncertain 5.9% (n. 2) and 2.9% (n. 1) unsatisfactory (Figure 9).

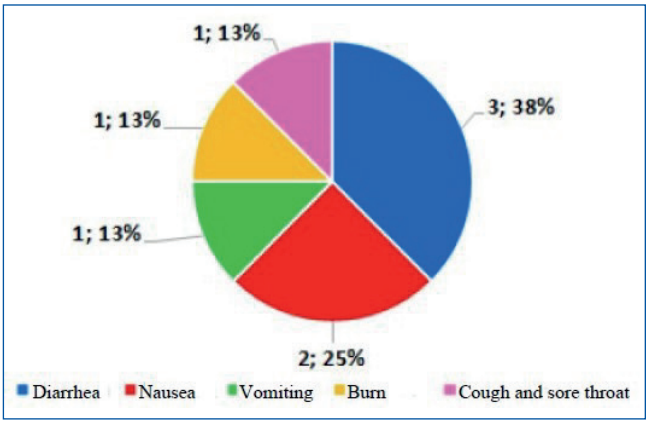

Fig. 6 - *Disturbances during the journey*

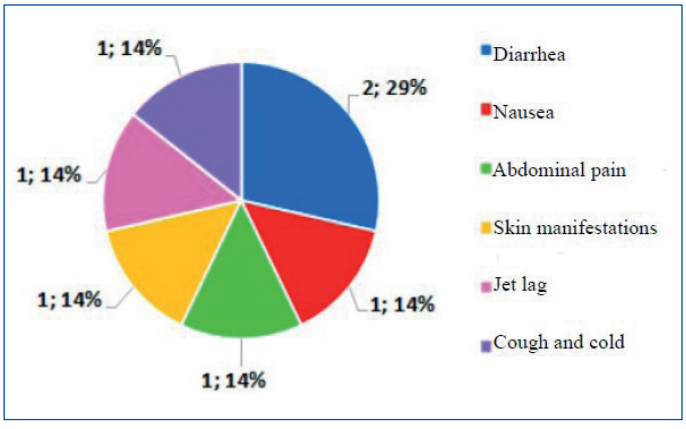

Fig. 7 - *Disorders after returning from the trip*

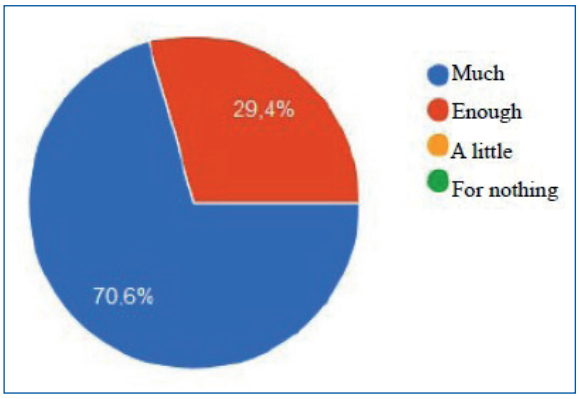

Fig. 8 - *Usefulness of the information received in the clinic during the pre-trip interview*

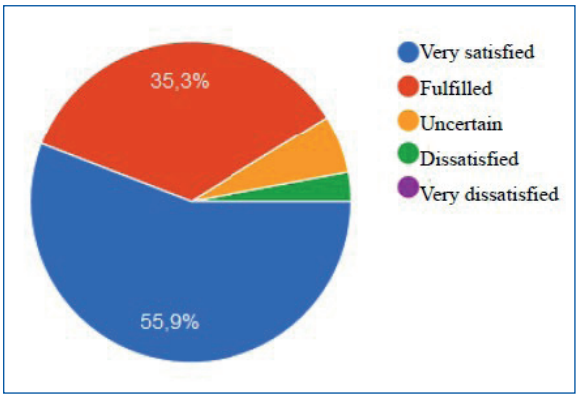

Fig. 9 - *Evaluation of the pre-trip interview*

When asked if he would advise others to go to the travel medicine clinic results: 91.2% (31 travelers) certainly yes, 5.9% (no.2) probably yes and 2.9% (no.1) probably not.

As for the helpful tips to improve the quality of service, travelers indicate that it would be appropriate to reduce the time between booking and interview, expand and make opening hours more flexible and report testimonials from people who they have experienced a similar journey through videos or other materials, in order to understand better the difficulties encountered during their stay abroad. Also, for the operators who take reservations are suggested greater clarity and updating: it would be advisable to provide more precise information on the place where the interview will be held e on the time necessary that must elapse between vaccination and departure to ensure that the traveler is protected, because if the traveler is not informed he tends to book the interview just before the trip. They suggest greater congruence with clinics of the same region, request more information about the diseases present in the destination country e the use of the necessary personal protective equipment.

DISCUSSION

The main limitation of the study is the low adhesion (38.1%) probably due also to the reorganization of the outpatient clinic which led to the insertion again personnel and the loss of follow-up resulting also from the cancellation of the trip due pandemic from Covid-19, which led to a further reduction of the population under study (24.5%). Further data collection would be needed to allow for a more useful comparison to the discussion.

The profile of the traveler that emerges from the study is in most cases that of a young adult female subject, informed about the health risks of the trip, that makes a short - medium duration adventure trip to the African continent and with urban and seaside living areas and who declares to be already informed about the risks associated with voyage. The type of travel and the direction to African countries exposes him more to risk of contracting diseases such as malaria, yellow fever and fecal-oral transmission (Schlagenhauf et al., 2015).

The data reported by the study photograph a traveler who is not always attentive to behavior a risk for traveler's diarrhea and always attentive to risky behaviors for sexually transmitted diseases. Compliance with the information provided during the interview pre-trip proves to be high, the scarcity and insignificance of reported disturbances is also proof of this during or after the trip.

Adherence to malaria prevention measures results: always for those of type behavioral and almost always (more than half of travelers) for chemoprophylaxis.

Most travelers rate the information received as very useful and the interview in satisfactory / very satisfactory surgery and almost all would recommend others to contact the travel medicine clinic. These aspects are to be emphasized as the pre-trip interview seems able to increase adherence to vaccination and change behaviors, in particular those relating to food-borne illnesses o the use of repellents as reported in the literature (Tafuri et al., 2014).

It should be emphasized that the studio photographs the characteristics of travelers already sensitive to health promotion while traveling, which spontaneously require advice; remains certainly excluded a wide range of travelers who for various reasons do not know or underestimates the risks associated with stays in tropical and subtropical areas and therefore does not refer to the dedicated clinic.

CONCLUSIONS

Travelers have become a key element in the global spread of infectious diseases, they can spread infectious diseases in a destination country, in a country on the route, or in the own country after returning home. Many of these diseases are vaccine-preventable as well through the adoption of specific behavioral measures.

The promotion of health while traveling is an activity of fundamental importance for prevention of imported diseases. At the UU.OO. Hygiene and Public Health of the Company USL della Romagna there are dedicated clinics that offer consultancy and vaccine prophylaxis and which are managed by health assistants of the vaccination team in collaboration with the doctor who is involved during the vaccination session or for special cases. The conduct of the pre-trip interview requires knowledge on: main clinical aspects and epidemiology e travel-related disease prevention, good vaccination practice and basic skills of the counseling. This knowledge is part of the professional empowerment of the health assistant as a full-fledged professional in health promotion activities, including that of health while traveling. There is currently

no follow-up of the traveler I searched for to deepen through the preparation, in the pre-covid era, of the "Follow-up del international traveler ". The main limitation of the study is given by the low number of sample population also following the cancellation of scheduled trips due to a pandemic from Covid-19, further data collection would be required to allow a more useful comparison to discussion. Most travelers who signed up for the study rate the information very useful receipts and satisfactory/very satisfactory outpatient interview and almost wholly would advise others to go to the travel medicine clinic. Adherence to information provided during the pre-trip interview proves to be high, the scarcity is also proof of this e the small number of disturbances reported during or after the trip. These aspects are to be emphasized as the pre-trip interview seems able to increase adherence to vaccination and to modify I behaviors, particularly those relating to food-borne illnesses or the use of repellents as reported in the literature. It should be emphasized that the studio photographs the traits of travelers already sensitive to health promotion while traveling, which spontaneously require one consulting; a wide range of travelers is certainly excluded who for various reasons do not knows or underestimates the risks associated with stays in tropical and subtropical areas and therefore not goes to the dedicated clinic.

To complete the study, an analysis of the cases of infectious diseases related to an international travel reported in the province of Rimini in the period 1 January 2015 - 31 July 2020. Malaria, hepatitis A and dengue are the diseases associated with travel most frequently reported, with Africa, Latin America and Asia respectively as countries visited which, as from literature, are the countries at greatest risk for these diseases. In the period of realization of the study (1 October 2019 - 31 July 2020) one case of malaria and one case of hepatitis A were reported (unvaccinated subject) in travelers who had not received pre-travel advice. These data could be in line with what is reported in the literature on the association of the preliminary interview and lower morbidity rate of malaria and change in disease-related behavior of food origin.

From the analysis of the activity data of the Rimini clinic for international travelers, a traveler profile in some respects comparable to that found in EuroTravNet centers, especially with regard to age and the reason for the trip.

On the basis of the data collected, the importance of keeping the attention of the traveler high is confirmed towards the health risks associated with staying in countries that are poor in resources and scarce hygienic conditions such as Africa, Asia and South America.

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