WHO smoke-free city case study

Tobacco-free cities for smoke-free air: a case study in Mecca and Medina



© World Health Organization 2011

All rights reserved. Requests for permission to reproduce or translate WHO publications – whether for sale or for noncommercial distribution – should be addressed to the WHO Centre for Health Development, I.H.D. Centre Building, 9th Floor, 5-1, 1-chome, Wakinohama-Kaigandori, Chuo-ku, Kobe City, Hyogo Prefecture, 651-0073, Japan (fax: +81 78 230 3178; email: wkc@wkc.who.int).

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by WHO to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either express or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use.

Abbreviations

EMRO WHO Regional Office for the Eastern Mediterranean

NGO Non-governmental organization

US\$ United States dollar

WHO World Health Organization

WHO FCTC WHO Framework Convention on Tobacco Control

Contents

| Ack | nowl | edgements | 3 |
|----------|--------------------------|---|-----|
| Foreword | | | 4 |
| 1. | Intro | oduction | 6 |
| 2. | The | Context | 6 |
| 2 | .1 | City Background | 6 |
| 2 | .2 | Tobacco Use and Smoking Behaviour | 7 |
| 2 | .3 | The Smoke-Free Policy and Legal Context | 7 |
| 3. | Smo | oke-Free Initiative in Mecca and Medina | 8 |
| 4. | Key | Stages in the Development of the Initiative | 9 |
| 5. | Imp | act of Mecca's and Medina's Smoke-Free Initiative | .13 |
| 6. | Conclusions and Lessons1 | | .14 |
| Ref | ernce | esError! Bookmark not defin | ed. |

Acknowledgements

The WHO smoke-free city case study *Tobacco-free cities for smoke-free air: a case study in Mecca and Medina* was developed for the WHO Centre for Health Development in Kobe, Japan, WHO Tobacco Free Initiative in Geneva, Switzerland and the Regional Office for the Eastern Mediterranean in Cairo, Egypt. It was written by Mostafa K Mohamed, Ain Shams University in Cairo, Egypt and edited by Jon Dawson, Jon Dawson Associates in Chester, United Kingdom.

Foreword

All people have a fundamental right to breathe clean air. There is no safe level of exposure to second-hand smoke (SHS), which causes heart disease, cancer and many other diseases. Even brief exposure can cause serious damage. Only a total ban on smoking in all indoor public places, including workplaces, protects people from the harms of SHS exposure, helps smokers quit and reduces youth smoking. Guidelines to Article 8 of the WHO Framework Convention on Tobacco Control (WHO FCTC) help countries know exactly what to do to protect their people from SHS. An increasing number of countries have adopted legislation to accomplish smoke-free environments. Smoke-free legislation is popular wherever it is enacted, and these laws do not harm business. Any country can implement effective smoke-free legislation. However, only a small proportion of the world's population currently has meaningful protection from SHS.

While a national law protecting all the people in a country is ideal, cities can often pass legislation sooner than countries. In many cases public sub-national legislation or local regulations can be effective ways to address the issue with measures beyond the legal or political scope of national governments, and even to anticipate or promote national interventions. A growing number of cities and counties across the globe have already taken action. Many cities have every authority to pass comprehensive smoke-free laws to eliminate SHS exposure. If comprehensive smoke-free legislation does not exist at another jurisdictional level, these cities should use their authority to adopt laws or other available legal instruments to prohibit tobacco smoke in these places. Some cities may not have adequate authority to pass strong, comprehensive legislation. However, this does not mean that they should not take action. Most cities will at least have the authority to prohibit tobacco smoke in certain types of workplaces, for example, local public transportation and municipal public buildings. They can adopt legislation prohibiting smoking indoors in whatever categories of establishments they have authority to regulate. In addition, all cities can advocate for action at other governmental levels. Mayors and other city leaders can directly advocate for national comprehensive smoke-free laws.

In a joint project, WHO Centre for Health Development, Kobe (WKC) and the WHO Tobacco Free Initiative (TFI) aimed to facilitate local action by documenting the experiences of nine selected cities in becoming smoke-free. Their interventions and processes were examined by local experts, based on evidence from a wide range of local sources. These included documentation, archival records, direct observation, interviews and participant-observation. A case study database was created and the most relevant documents kept on file, including statements from key-informants. Some cities have banned smoking in enclosed public places including workplaces, educational facilities, transportation, shopping malls, restaurants, and bars. Other cities have implemented smoking bans as part of

comprehensive tobacco control regulations, while imposing other restrictions, for example on tobacco sales and advertisements. Cities use different mechanisms to introduce such regulations and their impact goes beyond the cities adopting the smoke-free policies.

The present case is one in a series of nine case studies of cities that have engaged in the process of becoming smoke-free. Although not all of the cities have yet accomplished the goal of becoming a "smoke-free city", they provide lessons learnt in relation to political commitment for local action towards smoke-free air for their citizens and the role of civil society in urging city governments to take action, helping them to build effective partnerships and to conduct awareness campaigns that benefit enforcement and maximize compliance. We hope that these lessons can be used by municipalities to succeed with local smoke-free legislation or tobacco control programmes. Municipal success may trigger action in other cities and countries, and thus contribute to worldwide protection from exposure to SHS.

1. Introduction

1.1 In 2001, on *World No Tobacco Day*, the Late King Fahd announced that Mecca and Medina would become smoke free cities. In recognition of this proclamation, he received a WHO award later that year. This directive*, although not a formal law, has a similar force within the Kingdom of Saudi Arabia. This case study examines how Mecca and Medina have taken forward smoke-free and wider tobacco control agendas by placing emphasis on banning sales of tobacco within the cities.

2. The Context

2.1 City Background

- 2.1.1 Mecca and Medina in Saudi Arabia are Islam's two most sacred places and are revered by more than one fifth of the world's population. Mecca has a population of 1.7 million and is home to the world's largest mosque Al Masjid al-Haram which can accommodate up to 4 million worshippers. Medina city has a population of 1.3 million residents. Both cities attract around 8 million visitors each year. On average, between 3 and 4 million Muslims arrive in the cities for a two month period during the Hajj[†] (pilgrimage) and a further 2 to 4 million arrive during the month of Ramadan.
- 2.1.2 The economic activity associated with hosting the cities' Muslim visitors accounts for a significant proportion of the cities' business and employment. Both Medina and Mecca have central business districts that surround their major mosques and that are a focus for the services related to religious activity.
- **2.1.3** Within Saudi Arabia, each province has a Governor and each city has a Mayor who is supported by a City Council. Half of City Council members are elected and half are appointed by the Governor. Royal Decrees govern and regulate the work of councils and, their municipalities.

^{*} A directive is common term for the highest authority (King, or prince) sending policy messages to the executive authorities for implementation

[†] Hajj or pilgrimage The Hajj is a pilgrimage to Mecca, http://www.hajjinfo.org/. It is the largest annual pilgrimage in the world and is the fifth pillar of Islam that must be carried out at least once in a lifetime by every Muslim who can financially cover the cost and is physically able to do so. The pilgrimage requires a visit to Makkah for an average of 7 days from the 7th day of Dhu al-Hijjah, the last of the 12 months of the Islamic Lunar (eleven days shorter than the Gregorian calendar used in the Western world).

2.2 Tobacco Use and Smoking Behaviour

- 2.2.1 Estimates of smoking prevalence in Saudi Arabia vary. In 1996, the Family Health Survey indicated that smoking prevalence was 22%. The most recent data, from an, as yet, unpublished survey by the Ministry of Health in Saudi Arabia, suggests that smoking prevalence in the Kingdom for those above the age of 17 years old is 21% among males and 1.3% among females. In terms of the incidence of smoking, estimates of average daily consumption, between 1995 and 1999, vary from 12 to 21 cigarettes per day. As national level data cannot be reliably disaggregated to city level, there is no specific data for Mecca and Medina for tobacco smoking or consumption.
- 2.2.2 There is anecdotal evidence that consumption of tobacco in Saudi Arabia has increased in recent years. This has largely been attributed to improving economic conditions, higher family incomes and exposure to smoking lifestyle behaviours in the media.

2.3 The Smoke-Free Policy and Legal Context

- 2.3.1 Saudi Arabia signed the WHO FCTC in 2004. Since then it has adopted a religiously inspired and radical policy approach to strengthening tobacco control. As the Custodian of the two Holy Mosques, King Abdallah following the steps of his late brother King Fahd took a leading role in implementing the WHO FCTC. He adopted an innovative approach, utilising a faith-based strategy to address the country's tobacco control challenges.
- 2.3.2 Working within this faith-based paradigm, a *National Multi-Sectoral Committee* for *Tobacco Prevention* has adopted a National Tobacco Control Programme that focuses on primary prevention and supporting tobacco cessation. National legislation also bans smoking in health and educational facilities and on public transport.
- 2.3.3 Legislation also sets down specifications for cigarette manufacture, bans media advertisements and prohibits the sponsorship of sports events. In practice, however, apart from in Mecca and Medina, few cities in the Saudi Kingdom implement the legislation.
- 2.3.4 Nevertheless, since 2008, further measures by the Ministry of Health, at national level, have included the issuing of new rules to increase pressure on agencies importing tobacco, by forbidding their involvement in bids and contracts with the Ministry of Health for any procurement of drugs or other supplies. Some efforts are also being made to initiate taxation and price increases on tobacco products.¹

Background to the faith-based approach

2.3.5 The faith-based approach that underpins Saudi tobacco control policies reflects the Islamic perspective and rulings of leading religious figures. Back in 1988, the

EMRO published *Health education through religion - an Islamic ruling on smoking.* This cited all the *fatwas*[‡] related to smoking. The fatwas stated that smoking in any form, and by whichever means, causes extensive health and financial damage to smokers. Consequently, and on this evidence alone, smoking would be forbidden to Muslims and they should not smoke. This view is reinforced by the Muslim obligation to preserve one's health and wealth, as well as that of the society, and by the indisputable medical evidence about the dangers of smoking.

- 2.3.6 Subsequently, in 1996, a meeting of Muslim scholars in Amman examined the way in which Islamic teachings encourage health promotion and healthy lifestyles. Reflecting on the evidence, they concluded that smoking is against the teachings of Islam.
- In 1999, major Muslim scholars further defined the Islamic ruling on smoking. They asserted that as one of the basic tenets of Islam is the protection of the mental and physical integrity of individuals, the harmful health effects of tobacco make its consumption a contraindication of Islamic teaching. Dr Farid Wasil 1999, the Grand Mufti of Egypt declared that smoking is *Haram* (forbidden)§ in Islam because of its damaging effects to human health.
- **2.3.8** This faith-based evidence and the subsequent tobacco control strategy have been central to the impetus and the justification for a focus on tobacco control and smoke-free initiatives in Mecca and Medina.

3. Smoke-Free Initiative in Mecca and Medina

3.1 King Fahd's declaration in 2001 for Mecca and Medina to be tobacco-free led to concerted efforts by the National Tobacco Control Programme, the Ministry of Health and the Anti-Smoking Committees (non-governmental organisations) in the two cities to implement and ensure the continuity of the initiative. An array of implementation steps and activities were carried out to achieve the Royal initiative of a tobacco free Mecca and Medina (see section 4).

_

[‡] A *fatwa* is a religious opinion given by highly esteemed religious scholars.

[§] Islam has forbidden behaviors called "Haram" as the major sins (killing, steeling and adultery etc...) as these actions usually hurt other humans, There are some behaviors that are also prohibited as drinking alcohol that cause damage to one's own health and body. Since Smoking has started long after the teachings of Islam were conveyed in the Quran and in the Prophet Mohamed's teachings, there was no ruling on Tobacco smoking for a long time. This has gradually changed over several stages with more information being published on the damage smoking causes for the smoker's health and for other people as well. Muslim Scholars have issued the ruling based on these facts that smoking should be forbidden. Some viewed the evidence falls under a lighter degree of discouragement rather than forbidding, but this argument has stopped with appearance every day of a new evidence about the harm to non smokers as well.

- A distinctive feature of the approach adopted in Mecca and Medina was its focus on targeting and restricting tobacco sales as the way to progress a smoke-free agenda. This strategic approach complemented existing smoke-free legislation (the ban on smoking in hospitals, schools and government offices) and consensual norms (the smoke-free areas in and around the holy mosques). One of the stated reasons for this approach was that, with the cities having a large number of visitors with many different languages, it would be more practical to place emphasis on preventing tobacco sales. It also meant that action could be taken, following the royal announcement, without a need for additional legislation.
- 3.3 Because this smoke-free approach was not part of a new law, and emanated from a policy directive, penalties could not be applied to smoking violations. Instead, Municipalities sought ways to utilise existing laws, for licensing stores and cafes, which do provide for penalties such as in relation to the selling of tobacco in restaurants and cafes. In this way, the Municipalities, following directives from the local city council and the City Mayor, have used their powers to withdraw and stop issuing licences to restaurants and cafes that serve tobacco near residential areas, moving them beyond the city limits.
- A series of actions (explored further in section 4) that include specific prohibitions to restrict the sale and use of tobacco have been put into effect in both Mecca and Medina. In Medina, the actions were phased in three stages with the area being included expanding and moving outwards from the centre at each stage. In Mecca, the actions applied in one step. Actions include:
 - prohibiting all tobacco sales within city limits and in all food stores outside the city limits;
 - prohibition of tobacco sales beyond city limits in the neighbourhood of mosques and schools;
 - prohibiting sales to youth below 18 years old;
 - prohibiting waterpipe smoking in cafes and restaurants within residential areas and near mosques, schools and wedding halls.

4. Key Stages in the Development of the Initiative

The Royal announcement

4.1 Although there was some prior efforts in both Mecca and Medina by charities and civil society to take forward a tobacco control agenda, a key catalyst for change was a letter from the EMRO Regional Director to the late King Fahad asking him to make the smoke-free announcement on the 2001, World No Tobacco Day. The timing reflected recommendations being made by the WHO Tobacco Free Initiative team and the publication of Islamic rulings against

smoking by religious scholars in Egypt and in Saudi Arabia.² As a custodian of the two holy mosques, the King rapidly approved this plan and agreed to make the announcement.

Organisational arrangements and partnerships

- Immediately after the initiative, the Mayors established a "High Committee for Tobacco Prevention" in each city to implement the directive. The committee membership was determined by an official decree from the Governor of the province. The Committees were headed by the Mayor of the City. Other members included representatives from many departments such as health, education, culture and information a representative for Hajj affairs, the Holy Mosques, universities and chambers of commerce. The Committees' remit included:
 - developing and recommending, to the Mayor, procedures and plans to implement the smoke-free agenda;
 - supporting the implementation of the agenda through their respective organisations;
 - assisting the National Tobacco Control Programme Committee in their plans and actions in the city.
- 4.3 The seniority of members of the Committee facilitated decision-making and gave it the authority to take action. Importantly, it also helped to obtain access to resources, supported collaboration with different municipalities and, in addition to a sizable budget (close to US\$ 1 million per year) from the Ministry of Health Programme for Tobacco Prevention, ensured further funding of actions from local sources. In addition, to maximise benefits and cost effectiveness, all charitable NGO's were organised, by a directive, to coordinate their efforts in fighting tobacco smoking with the Committee.
- **4.4** Structuring the Committee in this way had several advantages:
 - it was easier and more expeditious to assign activities to different sectors through the respective member in the Committee;
 - government resources could be channelled to the Committee and their municipalities, whilst municipalities could participate with their own funding for actions within their territory.
- In practice, Mecca, in particular, had a very powerful committee that was orchestrated by the national representatives of the Ministry's Tobacco Prevention Programme. Importantly, it included membership from all municipalities and had effective co-ordination with NGOs in the province. This enabled the city to make rapid progress.
- 4.6 More widely, all business groups, charitable religious groups and civil society organisations including a particularly active anti-smoking charity in Medina were happy to provide support to the cause. They saw it as a positive

contribution to developing their society, and as a means of obeying God's teachings by helping to prevent a "sinful behaviour" - as set out in the religious Fatwas on smoking.

Implementation: key actions

- 4.7 Whilst the implementation plans for the two cities were broadly similar, the timing and the speed with which actions were taken forward differed. In Medina, implementation began earlier and evolved gradually over several years. In Mecca, in contrast, activities commenced later but were rolled out across the city more rapidly.
- 4.8 A key tactic adopted in both cities was to extend, in a series of phases, the areas to which restrictions on tobacco sales would apply. Moving from the centre outwards, a first step was the banning of tobacco smoking in the areas surrounding the two Holy Mosques in Medina and Mecca, the banning of the sale of tobacco within one kilometre from the Holy Mosques and the transfer of waterpipe cafes beyond the areas surrounding the mosques.
- 4.9 The places covered by a formal prohibition of tobacco smoking remained limited to the open areas surrounding the two mosques in both cities. In these areas, youth volunteers from the Saudi Red Crescent collaborate with the keepers of the Mosques keepers for "guiding" visitors should they start to light a cigarette near the mosque zones.
- 4.10 However, the ban on tobacco sales eventually covered the whole of the city limits for both Medina and Mecca. Beyond that, the ban was restricted to the areas surrounding the Holy Mosque and to grocery stores in residential areas.
- **4.11** Targeting tobacco sales was, therefore, central to the smoke-free strategy in both cities. This was achieved by:
 - Gradually phasing out the existing regulations for licensing tobacco sales to
 eliminate those still valid and, from 2002, to decline any new license
 application. Penalties were available in the existing laws for those not
 complying with the new directives forbidding sales within the designated
 parts of the city.
 - In both cities, tobacco sales most commonly take place in small local grocery stores not in specialised tobacco shops and the municipalities, since tobacco is not a food item for which their licence is granted, focused their attention on preventing these stores from selling tobacco. Essentially, because tobacco is not a food item, it is illegal to sell it under a licence issued specifically for a food store. Hence, licences were not renewed or were revoked if stores continued to sell tobacco.
 - Waterpipe cafes were the first target for the policy to transfer sales of tobacco to beyond the city limits and away from residential areas, mosques and schools in the entire province. This form of tobacco smoking

is very common in Saudi Arabia and produces a large amount of visible smoke that affects all people around the cafes as well as the smokers themselves. Whilst cigarette smoking could be practiced in privacy, smoking waterpipes in open cafes is particularly frowned upon by the religious leaders. It is viewed as "committing the sin in public", challenging good Muslim behaviour and, potentially, promoting smoking behaviour amongst non smokers. In this context, transferring cafes outside the city limits and away from mosques, houses and schools was meant to support efforts to prevent young people from starting to smoke as well as protecting non-smokers from exposure to second-hand smoke.

Raising awareness

- 4.12 Increasing awareness about the hazards of smoking and the tobacco control policy in the cities amongst the public and city visitors was a key part of the overall approach. An annual plan is prepared for all promotional activities and committee members take a lead in implementing it. Awareness raising, in particular, has targeted the pilgrimage season and Ramadan. Actions have included:
 - campaigns in schools, community meetings and gatherings of the pilgrims;
 - using different mass media, brochures, pamphlets, posters, umbrellas with anti-tobacco messages, cassette tapes and large billboards in different languages. An annual plan is prepared for all activities and, in each committee, members take a role in their own parent association or government agency to implement the plan.
- **4.13** NGOs and charitable societies have actively participated in printing and distributing materials, holding community meetings or providing funding for campaign actions.

Complementary tobacco control actions

4.14 To support wider tobacco control objectives and complement the interventions outlined above, smoking cessation services within the cities have been enhanced. Efforts have focused on promoting the national smoking cessation clinics services – which operate free of charge – by training staff, boosting resources, increasing awareness about the service and improving access to it.

5. Impact of Mecca's and Medina's Smoke-Free Initiative

- This section considers the impact of the smoke-free initiative in Mecca and Medina in terms of:
 - exposure to second-hand smoke;
 - tobacco sales;
 - market prices.

Exposure to second-hand smoke

- Crescent volunteers reported, for this case study, that they observe very little smoking now and most of the visitors know from the large signs that it is a smoke free city and that they should not smoke in the area around the Mosque. Whenever they find someone smoking, they gently instruct him to stop and give them a religious teaching message about their health. In other public spaces, such as restaurants and cafeterias, smoking has continued, but the impact of limiting tobacco sales combined with an increased awareness that smoking within the holy cities does not constitute "good behaviour", means that it is much reduced.
- 5.3 An air quality study to test for levels of environmental tobacco smoke conducted for this study suggests that air quality is better in areas where smoking is prohibited than where smoking continues to be more freely practised such as in enclosed spaces in malls.

Tobacco sales

- According to statistics provided by Mecca Municipality, in 2008, the first assessment of the policy's implementation found that 75% of stores had complied with the requirement not to sell tobacco. Fines were issued to the remainder of the shops. Second offenders will be liable to lose their licence. A similar assessment for Medina has not yet been conducted.
- 5.5 However, in both cities, the removal of waterpipe cafes has been comprehensive. There are no longer waterpipe cafes inside the city limits and, anecdotally**, citizens confirm that they need to travel a long way if they want to visit one.

Market prices

One of the most profound impacts of the policy of squeezing the availability of tobacco from retail outlets has been to stimulate a black market and to push up the price of tobacco.

^{**} Evidence drawn from web based discussion groups and clips from News articles on the web

5.7 The black market started immediately after the squeeze on tobacco retailers began. Moreover, smokers found themselves either paying double to three times the regular price of a pack of cigarettes or having to drive to beyond the city limits to buy their cigarettes. Many chatted over the internet expressing their dissatisfaction and anger with the new rules and stating that now they have to stock up on packs on a single trip to save time and money and to ensure that they can have a cigarette when they need one. Based on market economics, and despite the elasticity of demand associated with tobacco products, large price increases are likely to lead to lower consumption.

6. Conclusions and Lessons

Lessons learnt

- The Mecca and Medina Smoke-Free City experiences and its original approach to progressing a smoke-free agenda highlight a series of lessons for tobacco control agendas in Saudi and further afield particularly in the Muslim world. They provide important lessons for taking forward smoke-free agendas. Key amongst these are:
- **Political leadership.** The role of the King in a state monarchy in instigating the smoke-free agenda was crucial to ensuring the agenda was adopted and progressed. Equally, the appointment of key people on the committees able to push the agenda forward was a significant asset.
- **Religious doctrine.** Given the religious nature of the two cities, and of religious influence on the way of life in the cities, on its many visitors and on the country's leaders, the Fatwas and opinions of religious leaders and scholars provided important support, motivation and justification for the tobacco control actions adopted.
- **Partnership working.** Actions in both cities benefited from the involvement of the local city municipality working in concert with the Ministry of Health and other partners including charitable and other civil society organisations fighting tobacco.
- **6.5 WHO role.** The strategies of WHO, EMRO are considered to have had a significant influence on instigating a government-led focus on tobacco control. In particular, through contributing to international meetings of respected religious scholars, disseminating outcomes of meetings to public and health authorities in the region, publishing Fatwas at the appropriate time and utilising *No Tobacco Days* to push for effective action.

Final remarks

- 6.6 The Mecca and Medina approach does, however, also flag up a number of shortcomings from attempting to progress a smoke-free agenda with a comprehensive smoke-free law or other legal instrument that would prohibit smoking in all indoor spaces. Current penalties apply to the sale of tobacco rather than its consumption. Moreover, the emergence of a black market does undermine efforts to restrict consumption and, therefore, smoking in public places. Without a comprehensive smoke-free legal framework, local administrations are constrained by limited powers and reluctant to push for making all public and workspaces smoke-free.
- 6.7 Nevertheless, the country's unique position in the Islamic World of being the land where the two holy cities "Mecca and Medina" exist provide an opportunity for spreading smoke-free and wider tobacco control messages far and wide. Not least, through exposing the millions of Muslim who visit each year, from all over the world, to the cities' smoke-free objectives.

References

¹ Saloojee, Yussuf, Chaouki, Noureddine, Tobacco Free Mecca and Medina, 2007. World Health Organization, Regional Office for the Eastern Mediterranean. UC San Francisco: for Tobacco Control and Education. Retrieved from: Research http://www.escholarship.org/uc/item/46p7t7g8

² Khayat, M.H. The Right Path to Health, Health Education through religion, Islamic Ruling on Smoking, 2nd ed 2000. WHO Health organization, Regional Office for the Eastern Mediterranean, Alexandria, Egypt.