



Contents lists available at ScienceDirect

Research in Social and Administrative Pharmacy

journal homepage: www.elsevier.com/locate/rsap

Health and medication literacy and the desire to participate in pharmacotherapy decision making – comparison of two countries

M. Cordina^{a,*}, K. Hämeen-Anttila^c, J. Lauri^b, S. Tabone^a, H. Enlund^c

^a Medicines Use Research Group, Department of Clinical Pharmacology and Therapeutics, Faculty of Medicine and Surgery, University of Malta, Malta

^b Department of Mathematics, Faculty of Science, University of Malta, Malta

^c Finnish Medicines Agency FIMEA, Finland, P.O.Box 55, 00034, FIMEA, Finland

ARTICLE INFO

Keywords:

Health literacy
Medication literacy
Desire to participate
Medication
Finland
Malta
Population survey

ABSTRACT

Background: Health and medication literacy may be important factors in the outcomes of medical treatment. Similarly, shared decision making or lack of it may influence patient's behavior and adherence to medications. **Objectives:** To describe health and medication literacy as well as factors associated with poor medication literacy in two different populations and secondly, to describe desire to participate in decisions concerning medications; and to assess the role of poor medication literacy in decision making.

Methods: A general population based survey in Finland (n = 8003) and in Malta (n = 2000). Health and medication literacy and the desire to participate in decision making was each measured with three statements based on the literature. Medication literacy was operationalized as understanding the instructions on package insert and ability to follow instructions on pharmacy label.

Results: Fifteen percent of the Finnish respondents and 16% of Maltese reported always or often having problems understanding package inserts, i.e., poor medication literacy. Males (p = 0.004) and respondents in the age group 65–79 years (p < 0.001) were more prone to report such poor medication literacy. Respondents in Finland (59%) and Malta (65%) reported wanting to discuss different treatment options with the doctor. The respective percentages (42% Finland, 57% Malta) were lower for discussing about the choice of medicine and for deciding about the medicine (36% and 43%, respectively). The desire to participate in deciding about the medicines was higher among females (p < 0.001) and Maltese respondents (p < 0.001). Also those with poor medication literacy more often (p < 0.001) expressed a desire to participate in deciding in the choice of medicine.

Conclusions: Medication literacy was rather low, while desire to participate in pharmacotherapy decision making was high, especially in Malta. Overall, women tended to be more willing to participate in decision making. The desire to participate in decisions was higher among persons with low medication literacy.

1. Introduction

During the past two decades the importance of health literacy (HL) and optimal health outcomes has been widely recognized.^{1,2} HL has also been given prominence in several policy documents including those produced by the EU and WHO.^{3,4} Several definitions of HL have been proposed; The Institute of Medicine¹ defined it as “the degree to which individuals have the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions” while Kickbush et al. proposed an even more comprehensive definition: “the ability of citizens to make sound decisions concerning health in daily life-at work, in health care at the market

place and in the political arena”.⁵ This includes several competencies like basic health knowledge, reading, comprehending and evaluating health information, self-care, verbal communication, and decision making.

Several conceptual models of health literacy have been introduced. The model by Nutbeam⁶ was one of the first to include three dimensions; functional, interactive and critical health literacy. Based on a systematic review, Sorensen et al.⁷ proposed an integrated model containing 12 dimensions referring to the knowledge, motivation and competencies of accessing, understanding, appraising and applying health related information in different contexts.

Health literacy has been assessed in several countries all over the

* Corresponding author.

E-mail addresses: Maria.cordina@um.edu.mt (M. Cordina), Katri.hameen-anttila@fimea.fi (K. Hämeen-Anttila), Josef.lauri@um.edu.mt (J. Lauri), Sarah.tab@hotmail.com (S. Tabone), Hannes.enlund@gmail.com (H. Enlund).

<https://doi.org/10.1016/j.sapharm.2018.06.009>

Received 1 November 2017; Received in revised form 9 May 2018; Accepted 12 June 2018
1551-7411/ © 2018 Published by Elsevier Inc.

world and has been found to be limited.⁸ Based on a national assessment in 2003 it was estimated that 36% of the U.S. adult population has a basic or below basic health literacy resulting in serious challenges in understanding and acting on health information.⁹ In 2011, a comparative European assessment in 8 EU countries showed that on average 12% of the population aged 15 years and over had an inadequate general health literacy, while 35% had a problematic general health literacy.¹⁰

One important aspect of health literacy is medication literacy or pharmacotherapy literacy.¹¹⁻¹⁶ Until recently there was no consensus on the definition or contents of medication literacy.¹³ The issues are not new, including necessary information for optimal and safe use of medicines, skills and abilities needed, format of information and outcomes. Using a Delphi process medication literacy was defined as “the degree to which individuals can obtain, comprehend, communicate, calculate and process patient-specific information about their medications to make informed medication and health decisions in order to safely and effectively use their medications, regardless of the mode by which the content is delivered (e.g. written, oral or visual).”¹³ One American study indicated that language is an important barrier to physician-patient agreement.¹⁷ In a synthesis of qualitative studies of medicine taking it was concluded that concerns about medicines is the main reason why people don't take their drugs as prescribed.¹⁸ There have also been attempts to measure patients' self-efficacy in understanding and using prescription medicines.¹⁹

Given the central role medicines play in the treatment of most diseases, medication literacy is a key factor in the outcomes of medical treatment. It has been postulated that a large proportion of medication related adverse events would be preventable with better medication literacy.¹⁴ A meta-analysis showed that half of adverse drug reactions are preventable even if the percentage of inpatients and primary care patients with adverse reactions are largely unknown.²⁰ In the U.S. alone, it was estimated that there were approximately 100 000 yearly emergency hospitalizations for adverse events among the adults 65 years of age from 2007 to 2009.²¹ Of these hospitalizations nearly two thirds were due to unintentional overdoses.

The importance of active involvement of patients in medical decision making has been advocated by patient organizations, governments and international health organizations.^{22,23} However, patient preferences for shared decisions are not uniform^{24,25} and their preferences for receiving treatment information and taking responsibility for treatment decisions seem to vary according to age, gender and medical problems.²⁴ Patients with hypertension have been shown to have a similar desire to participate in medical decision making irrespective of their level of health literacy – and such desire has been shown to be high.²⁶ Furthermore, Malloy-Weir et al.²⁷ showed, in their scoping literature review that higher assessments of patients' health literacy were not always positively associated with patients' desired or perceived level of participation or involvement in expressing and discussing treatment preferences. The level of health literacy tends to affect communication between physicians and patients, as patients with low health literacy ask their physicians fewer questions, and thus, experience less participatory decision making in their medical visits.^{26,28} Furthermore, even though patients desire to participate, the information provided to them is not necessarily satisfactory to elicit their participation.^{29,30} Different types of health literacy (functional, interactive and critical) may be important in decision-making, but context and content specific with a continuous interplay between the three levels.³¹ Power-imbalances between the physician and patient, interpersonal skills of the clinician, organisational factors such as limited time during consultations and beliefs about patients' role in decision-making influence the extent of patient involvement in decision-making.³²

Compared to HL, little is known on the overall prevalence of poor medication literacy and factors associated with it in different countries and contexts. Also the association between medication literacy and

decision-making is a largely unstudied area within pharmacy and healthcare. Finland and Malta are geographically the north-south extremes within the EU. Malta represents the Mediterranean culture and Finland represents the Nordic welfare society. Studying the same healthcare problems in two different societies with diverse healthcare systems may add an extra dimension in understanding the issues involved. The results may also apply to a potentially wider audience when trying to enhance patients' participation in decision-making with physicians and pharmacists.

The aim of this study was to 1) describe health and medication literacy and factors associated with poor medication literacy in two different populations, and 2) describe the desire to participate in decisions concerning medication and 3) assess factors associated with pharmacotherapy decision making including poor medication literacy.

2. Methods

2.1. Context

Culture has been defined as the “integrated pattern of human behavior that includes thoughts, communications, actions, customs, beliefs, values and institutions of a racial, ethnic, religious or social group”.³³ Thus, cultural differences which may influence literacy, medication literacy and shared decision-making in these countries include religion, and family relations. In both countries, the populations are largely homogeneous. However, in the small island of Malta, families and extended families are close and live in proximity to one another. The Catholic religion still contributes strongly to the Maltese culture and influences the people's beliefs and values especially in the older members of the population, stronger than Lutheranism does in Finland. In a large number of cases, Maltese individuals personally know their doctors and pharmacists, which is not the case in Finland.

In Finland, all citizens are entitled to primary healthcare, however, there is a small fee to be paid at every visit. In addition to primary care, specialized health care is offered in 20 hospital districts. It is the norm that primary care physicians practice in a certain geographic area, however, it is usual that a patient is seen by different physicians in primary care. Home visits are uncommon. There is a complementary private health care sector with part of the fees reimbursed by the Social Insurance Institution.

There are altogether 810 pharmacies in Finland for a population of 5.5 million inhabitants³⁴ (approximately 1 per 6800 inhabitants), owned by pharmacists. During the dispensing of prescription medicines, the pharmacist adds a label containing instructions prescribed by a physician for an individual patient. Only original packages are used. According to the EU laws,³⁵ all medicine packages should include a patient information leaflet throughout EU countries, and this law is fully followed in Finland.

In Malta, all the population, which amounted to 434,403 people at the end of 2015,³⁶ is entitled to free primary health care. This is offered through primary care health centers available in various towns and villages. In addition to this, it is common practice for individuals to have their own private family doctor which they would consult on a regular basis and with whom they tend to form a strong doctor-patient relationship. Family doctors routinely perform home visits enabling them to have an in depth understanding of their patients' socio-medical situations.

In Malta, medicines are only available through the 229 pharmacies which are owned both by pharmacist and non-pharmacists, making the pharmacy to population ratio approximately 1:1900. A pharmacist is present at all times to interact with patients being dispensed both prescription and non-prescription items. Various categories of patients are entitled to free prescription medicines which are dispensed from a pharmacy they have chosen to be registered with, thereby establishing a relationship with the pharmacist/s working in that pharmacy. Dispensed medication does not always have a pharmacy label.

Download English Version:

<https://daneshyari.com/en/article/8950091>

Download Persian Version:

<https://daneshyari.com/article/8950091>

[Daneshyari.com](https://daneshyari.com)