

## Stereotypes in clinical prevention practices involving health education: a systematic review

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### Introduction:

Stereotypes or prejudices are frequently transmitted by physicians, as regards numerous patient characteristics such as age, gender, race/ethnicity and social class, and also disease. They have consequences on diagnosis, therapeutic decisions and prognostic assessment.

In the health education given during primary or tertiary prevention, the stereotypes or prejudices existence are sparsely documented.

**Objective :** To objectify stereotypes and prejudices on age, sex, race and social class levels disseminated by health professionals with regard to patients and discrimination in the framework of preventive education.

### Methods: Systematic review

#### ❖ Databases

MEDLINE, Web of Science, APA PsyArticles, from 1950 to 2020 (01/10/2020), and Francis (1971 to 2015 for Francis).

#### ❖ Study eligibility

at least one stereotype clearly defined on age or gender or race or occupation produced by physician on patient consequences of stereotype on health education during primary or tertiary prevention clinical practices **study conducted on physicians or patients** the outcome (dependent variable) was clearly defined

#### ❖ Algorithme

Table 1 : Chosen Mesh terms of each dimension studied and strategies on adding these terms in research

|            | Dimension 1:<br>Psychosocial terms  | Dimension 2:<br>Prevention terms   | Dimension 3:<br>Population terms      |
|------------|---|--|---------------------------------------|
| Strategy 1 | "prejudice"<br>"stereotyping"<br>"social discrimination"<br>"Social stigma"<br>"ageism"<br>"racism"<br>"sexism"<br>"occupations" and "stereotyping"<br>"social class" | "counseling"<br>"tertiary prevention"<br>"primary prevention"<br>"health promotion"<br>"health education"                      |                                       |
| Strategy 2 | Idem strategy 1   | Idem strategy 1  | "physician"<br>"Students,<br>Medical" |
| Strategy 3 | "bias"  | idem strategy 1  | idem strategy 2                       |
| Strategy 4 | Strategies 1 and 3  | "healthy lifestyle"<br>"Patient Participation"<br>"Treatment Adherence and Compliance"<br>"Health Literacy"<br>"Self Efficacy" | Idem strategy 2                       |

### Results: 21 articles

| Author       | Year | Journal             | Prevention type             | Specialty              | Stereotype from physicians      | Country         | Year    |
|--------------|------|---------------------|-----------------------------|------------------------|---------------------------------|-----------------|---------|
| Taira        | 1997 | JAMA                | nutrition                   | General medicine       | income                          | USA             | 1996    |
| Young        | 1998 | Tobacco Control     | smoking                     | Pneumology             | gender                          | Australia       | 1996    |
| We           | 1999 | JAMA                | APA                         | General medicine       | age, gender, social class       | USA             | NA      |
| Cokkinides   | 2008 | Am.J. Prev.Med.     | smoking                     | Pneumology             | race, ethnicity                 | USA             | 2005    |
| Haider       | 2011 | JAMA                | relationship                | General medicine       | Ethnicity, social class         | USA             | 2009-10 |
| Austin       | 2013 | J.Phys Act Health   | APA                         | Rheumatology           | age, gender, race, social class | USA             | 2007    |
| Blair        | 2013 | Fam Med             | treatment adherence         | Cardiology             | Ethnicity                       | USA             | 2010-3  |
| Csorz        | 2013 | J.Health Psychology | relationship                | Cancerology            | gender                          | Hungary         | NA      |
| Hagiwara     | 2013 | Social Sci Med      | relationship                | General medicine       | Ethnicity                       | USA             | 2006-8  |
| Tam          | 2013 | BMC fam pract.      | Alcohol                     | General medicine       | age, sociocultural              | Australia       | 2011    |
| Schiebe      | 2014 | J Mixed method      | APA, nutrition, weight loss | General medicine       | gender, social class            | France          | 2006-7  |
| Schoenthaler | 2014 | Ethn Health         | treatment adherence         | cardiology             | race/ethnicity                  | USA             | 2001-5  |
| Danesh       | 2014 | Prev Chronic Dis    | smoking                     | Pneumology             | race, ethnicity, age, gender    | USA             | 2010    |
| Davis        | 2016 | J Appl Gerontol.    | sexual disease              | Infectiology           | age                             | USA             | 2012-3  |
| Hagiwara     | 2017 | Health Commun       | relationship                | General medicine       | Ethnicity                       | USA             | NA      |
| Cormack      | 2018 | PlosOne             | treatment adherence         | Cardiology, psychiatry | Ethnicity                       | New Zealand     | 2014-15 |
| Khosla       | 2018 | Social Sci Med      | health responsibility       | Cardiology             | Ethnicity                       | USA, France     | NA      |
| Meijer       | 2018 | Pat Ed Couns        | smoking                     | Pneumology             | gender                          | The Netherlands | 2012    |
| Calabrese    | 2019 | AIDS patient care   | sexual disease              | Infectiology           | age, health literacy            | USA             | 2014    |
| Ungar        | 2019 | J Behav Med         | self-management             | Cancerology            | age, gravity                    | Germany         | 2018    |
| Herzig       | 2019 | BMC Fam Pract       | burden of treatment         | Chronic disease        | age                             | Switzerland     | NA      |

**Experimental study:** 43% with implicit association test (IAT) in 5 articles only - **Non Experimental :** 8 quantitatives (cross-sectional), 3 qualitatives (focus groups or interviews) and 1 mix.

**In 6/21 articles, counsels are sparse (e.g 19% of physicians talk about sexual health) an in 5/21, counsels are unsystematic (e.g 72-85% Tabaco, 56% physical activity).**

**Racial/ethnic** stereotypes or prejudices decrease likelihood of being advised.

**Age, gender or social class** stereotypes or prejudices are variable according to the heath topic: e.g. women seems to be more advices to physical activity than men.

**Compliance** is associated with patient gender and social class: e.g. low-income patients more likely changing their behaviour based on physician advice.

**Trust** is associated with race/ethnicity.

### Conclusions:

It is the first systematic review on this topic in preventive clinical practices. we needed to capture stereotypes and prejudices in health education with numerous concepts (see algorithme). We shows that the topic is more confidential than in curative decisions as.

**The review confirms the presence of stereotypes and prejudices on age, sex, race and social class levels disseminated by health professionals with regard to patients and discrimination in the framework of preventive education but it variable according to the health topic.**

Exhaustive information about stereotypes and prejudices in preventive clinical practices could help to reduce their incidence and consequences in terms of discrimination. Solutions are healing environments, integration of culturally and linguistically appropriate services, physician training with empathy module, coping techniques, patient self-efficacy development.

➤ **Perspectives:** Further studies are needed to highlight stereotypes and prejudices with experimental design.