INPLASY PROTOCOL

To cite: Chen et al. Stigma in colorectal cancer patients with colostomy, China: A systematic review and meta-analysis of current status and associated psychological factors. Inplasy protocol 202320073. doi: 10.37766/inplasy2023.2.0073

Received: 16 February 2023

Published: 16 February 2023

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Support: **There is no financial support for this project.**

Review Stage at time of this submission: **Completed but not published.**

Conflicts of interest:
None declared.

Stigma in colorectal cancer patients with colostomy, China: A systematic review and meta-analysis of current status and associated psychological factors

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Review question / Objective: **To analyze the current stigma and related factors of colorectal cancer stoma patients in China using Meta-analysis.**
To analyze the current stigma and related factors of colorectal cancer stoma patients in China using Meta-analysis.: **(1) The study design was: an observational study (cohort study, case-control study, cross-sectional study) (2) The study population was post-stoma patients with colorectal cancer in China (3) The study index needed to contain at least one scale related to the stigma that was tested for reliability (4) The outcome index needed to contain the level of stigma (x± s) or at least one psychological variable related to stigma after colorectal cancer stoma and report the correlation coefficient.**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 16 February 2023 and was last updated on 16 February 2023 (registration number INPLASY202320073).

INTRODUCTION

Review question / Objective: **To analyze the current stigma and related factors of colorectal cancer stoma patients in China using Meta-analysis.**

Rationale: **Research was found that 93.9% of patients with a permanent stoma have moderate to severe levels of shame, which can aggravate the effects of the disease, such as anxiety and depression, and is not conducive to recovery from the illness. Currently, the research on stigma in China is in its initial stage, with limitations such as imperfect research tools, few interventional studies, and narrow research perspectives.Effective interventions can**

help improve patients' acceptance of their colostomy and reduce their sense of stigma.

Condition being studied: With the development of China's economy and the change in residents' lifestyle and diet structure, the incidence of colorectal cancer is increasing yearly, seriously threatening residents' health and quality of life.Enterostomy is one of the most effective treatments for colorectal cancer.It is one of the most effective treatments for colorectal cancer. While treating the disease, the enterostomy alters the patient's standard fecal passage and prevents common control of bowel movements. It impacts patients' body image, and psychological and social adaptation, leading to a sense of shame for some patients. Sickness stigma is the internal shame patients feel when they are different due to their disease, manifested as discrimination and devaluation, labeling, non-acceptance, etc. Research was found that 93.9% of patients with a permanent stoma have moderate to severe levels of shame, which can aggravate the effects of the disease, such as anxiety and depression, and is not conducive to recovery from the illness. Currently, the research on stigma in China is in its initial stage, with limitations such as imperfect research tools, few interventional studies, and narrow research perspectives.Effective interventions can help improve patients' acceptance of their colostomy and reduce their sense of stigma.Therefore, this study aims to comprehensively assess the occurrence of stigma in colorectal cancer patients in China and analyze their related psychological factors employing meta-analysis to provide a basis for the clinical development of targeted and effective interventions.

METHODS

Search strategy: The Chinese search terms were "colorectal cancer, ostomy, stigma," and the English search terms were "colorectal neoplasms, Ostomy, Stigma, China." The time limit for the search was from the establishment of the database to August 4, 2022, and the language limit was Chinese and English. Chinese databases include CNKI, Wanfang data, VIP, and foreign databases include Pubmed, EMBase, CINAHL, and Web of Science.The language was limited to Chinese and English. Chinese databases include CNKI, Wanfang data, VIP, and foreign databases include Pubmed, EMbase, CINAHL, and Web of Science.

Participant or population: The study population was Chinese patients after colostomy.

Intervention: This was a cross-sectional study without relevant interventions.

Comparator: This was a cross-sectional study without relevant interventions.

Study designs to be included: (1) The study design was: an observational study (cohort study, case-control study, cross-sectional study) (2) The study population was post-stoma patients with colorectal cancer in China (3) The study index needed to contain at least one scale related to the stigma that was tested for reliability (4) The outcome index needed to contain the level of stigma (x± s) or at least one psychological variable related to stigma after colorectal cancer stoma and report the correlation coefficient.

Eligibility criteria: Exclusion criteria: duplicate publications, conference papers, reviews, full text not available, data not extractable, studies evaluated as low quality by literature quality.

Information sources: Database：CNKI, Wanfang data, VIP, Pubmed, Embase, CINAHL, Web of Science.

Main outcome(s): Psychological factors related to stigma;Stigma score.

Quality assessment / Risk of bias analysis: The quality of the literature was also evaluated by referring to the Agency for Healthcare Research and Quality (AHRQ)

cross-sectional research quality scale as the evaluation criteria.

Strategy of data synthesis: The extracted data were analyzed by statistical tests using Stata 17.0 software to combine the scores of the Sickness Stigma Scale for patients with colorectal cancer stoma. A statistical test was performed using I2 a test for heterogeneity; when the I2 value< 50% and P> 0.05 heterogeneity between studies was small, a fixed-effect model was used; whenI2 the value> 50% and P< 0.05 heterogeneity between studies was large, a random-effects model was used. Before the Meta-analysis of correlates of morbidity stigma. Fisher's Z value and SE were calculated using the formula after converting Fisher's Z value. Finally, summary r values were calculated. A comprehensive evaluation of the correlation between morbidity stigma and psychological variables. The specific conversion formula: (1) Fisher's Z=0.5×ln(1+r/1-r); (2) v_z =1/(n-3); (3) SE= v_z ; (4) summary r= e2z-1/e2z+1 (Z is the summary Fisher's Z value)[8]. The strength of the correlation between the two was determined by the range of the absolute value of summary r: 0-0.2 indicates no correlation or very weak correlation, 0.2-0.4 indicates a weak correlation, 0.4-0.6 indicates a moderate correlation, 0.6-0.8 indicates a strong correlation and 0.8-1.0 indicates robust correlation[9]. Differences were considered statistically significant at P<0.05.

Subgroup analysis: The following results were obtained using age, gender, geographic location, stoma type, fecal leakage rate, defecation, exhaustion, etc.

Sensitivity analysis: No sensitivity analysis

Language restriction: Chinese and English.

Country(ies) involved: CHINA/Fujian University of Traditional Chinese Medicine.

Keywords: colorectal cancer; stoma; disease stigma; Meta-analysis.

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